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ABSTRACT

The third edition of this bibliography is the outcome of a continuing attempt by the Clearinghouse for Applied Performance Testing to survey literature in this area of measurement. The general intent is to enable users to efficiently identify materials to suit their needs. A six-part classification system is used: theoretical/conceptual documents; descriptions of applications of applied performance tests (APT) in particular settings; research studies and reviews of research related to the development/use of APT; descriptions of APT; documents concerned with the development of APT; and bibliographies and other sources of information on applied performance testing. Information is provided as to where documents may be obtained. Abstracts are assigned content area designations indicating the field to which they relate, and are cataloged by these areas. Also specified are the skills or abilities whose measurement is discussed. Four grade/age levels are used to identify the educational level of examinees to which the document refers: elementary, secondary, postsecondary, and adult. Abstracts are within in the indicative style, and suggested user groups are identified. (GSK)

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Annotated Bibliography on Applied Performance Testing (THIRD EDITION)

CAPT

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TM 800382

ANNOTATED BIBLIOGRAPHY ON APPLIED PERFORMANCE TESTING (THIRD EDITION)

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USING THE BIBLIOGRAPHY

This edition of the Annotated Bibliography on Applied Performance Testing is the outcome of our continuing attempt to survey the literature in this area of measurement. As defined by CAPT, applied performance tests (APTs) assess performance in real life or simulated settings. Either the test stimulus, the desired response, or both, are designed to lend a higher degree of realism to the test situation than is the case with more traditional paper-and-pencil academic achievement tests. The identifying difference between APTs and other academic achievement tests is the test's fidelity to the characteristics of a real life task.

As will be evident through a perusal of documents abstracted in this bibliography, this definition encompasses quite a variety of measurement approaches. The concept of performance testing is multidimensional, including a multitude of testing strategies and purposes--even some not traditionally falling in the domain of "testing" per se.

Because of this fact, the audience for whom the bibliography was compiled is correspondingly diverse. Performance tests developed for occupational certification will be of interest to one set of users; those tests created for assessing communication skills in school settings will appeal to another group; measures of experiential learning outcomes will be valued by yet another set of readers. An assessment technique developed for a specific content area, examinee population and skill domain will be of most immediate utility to individuals working within those parameters.

In another sense, though, the function of this bibliography is to introduce the reader to measurement alternatives--approaches that have worked well in settings other than the one with which the reader is presently concerned. By virtue of the common threads running through APTs developed for diverse purposes and contexts, it is often worthwhile to examine how other disciplines have conceived and used such measures. The position taken by CAPT is that solutions to measurement problems in one discipline can contribute to the resolution of similar problems elsewhere. In other words, eclecticism is alleged to have its benefits, especially in an area of measurement theory which no one discipline can claim as its own.

How this Bibliography is organized

In the present edition, we have sought to characterize each citation in several ways, in addition to providing a descriptive abstract. The general intent is to enable users to more efficiently identify materials that may meet their needs. A second rationale for this format is to encourage the eclecticism mentioned above by "tagging" those documents that are likely to be useful in a variety of fields. The following is a description of the categories of information used to characterize materials cited in the bibliography.

Type of Document. In recognition of the fact that publications included in the bibliography have been written for a specific purpose or set of purposes, we have attempted to reflect these by using a six-part classification system. Documents are designated on one or more facets of this dimension through the numerical code(s) appearing at the left of the citation. These are interpreted as follows:

1 = Theoretical or conceptual documents dealing with issues in measurement, curriculum, instruction, and test use specifically related to applied performance testing: This category includes papers that address overarching concerns in applied performance testing, papers that seek to lay a theoretical groundwork for APT, and documents that integrate previous theory and knowledge. As such, materials falling in this category will tend to be relevant in a variety of testing contexts.

2 = Descriptions of applications of APTs in particular settings: This category includes materials in which a specific use of an APT is discussed, indicating, for example, the population being tested, the nature of the test (which itself is not necessarily included in the document), the use(s) made of test results, and judgments regarding the value of APTs in that setting.

3 = Research studies and reviews of research related to the development or use of APTs: Examples include validity or reliability studies, investigations of test bias or adverse test impact on racial or ethnic groups, and task analysis or competency identification research (leading to APT development). Documents falling in this category are distinguished from those in Category 1 by virtue of their basis in empirical research. In many cases, "type 3" documents are also coded as "type 1."

4 = Descriptions of APTs: This category includes actual test instruments, and supporting materials such as administration instructions, skill or objective definitions, directions for examinees, scoring instructions and criteria, rating forms, normative data associated with the test, and suggestions for interpreting results. Materials in this category often contain a description of the test development process as well. Often, "type 4" documents are also coded as "type 2" when they include a discussion of how the test has been used in a specific setting.

5 = Documents concerned with the development of APTs: These materials offer guidance in the process of creating APTs, starting with steps in identifying competencies to be measured, and proceeding on to selection of a testing approach (e.g., direct assessment vs. simulation vs. paper-and-pencil measures), exercise creation, development of performance criteria and scoring procedures, pilot testing and revision suggestions, and guidelines for using test results. Documents in this category are those concerned either with the general steps in APT development in a given field, or the development of a specific APT. If materials which fall in the latter group also include an actual test instrument, they are coded as both "type 4" and "type 5."

6 = Bibliographies and other sources of information on applied performance testing: This category includes materials that reference other publications related to applied performance testing or list and describe organizations engaged in APT development or use.

As indicated above, the six categories are sufficiently interrelated so that a given document may be coded in more than one category. However, we have tried to avoid being overly liberal in assigning these category designations to a document so as to maintain a relatively sharp focus in the codes.

Availabilty Information. In those cases in which the document is not likely to be readily available in a moderately large library, we have provided information on where it can be obtained. Publishers' addresses are given, along with document prices. Many materials are also available in hard copy through the ERIC Document Reproduction Service (EDRS); in these cases the six-digit ERIC document (ED) number is provided, along with the number of pages. An EDRS order form is attached at the end of the bibliography. Those materials not easily (and cheaply) obtainable elsewhere are available from CAPT at the cost of ten cents per page.

Content Area. Each abstract is assigned a content area designation indicating the field to which it relates. Abstracts are catalogued by content area and are ordered alphabetically by author within each category. The content area in which materials are catalogued include the following:

Content Area	Page
Reading	6
Writing	12
Speaking and Listening	29
General Problem Solving	34
Vocational Education	43
Experiential Learning	61
Life Skills	71
Professional Competence	79
Education	80
Managerial Skills	87
Medical Fields	100
Skilled Trades	111
Assessment Methodology	115

The title page for each of the nine content areas include an index by first author of the type of documents (described above) annotated in that section.

Generally, the content area titles are self-explanatory. However, three deserve a bit of elaboration.

"General problem solving skills" denotes generic abilities not specifically tied to particular discipline or subject area, but which contribute to problem solving effectiveness in a number of settings. The use of this category does not imply that problem solving ability is not reflected in other content areas. In particular, documents in the areas of vocational education, professional competence and experiential learning often deal with the measurement of problem solving skill; however, examinees' tasks in these cases are content-specific.

The area of "life skills" denotes abilities called upon in coping with such tasks as seeking a job, finding an apartment, understanding legal documents, using a bus schedule, or filling out a credit application. Such activities draw upon competence in reading, writing and mathematics, but also demand task-specific knowledge for their successful accomplishment.

"Professional competence" designates the content area for documents concerning the assessment of job-relevant performance. Professions referenced include education (teaching and administration), management skills (including leadership), medical fields, and skilled trades.

Skills Tested. This category of information conveys the type of skills or abilities whose measurement is addressed in the document. Here we have attempted to be as specific as possible without listing numerous skill objectives for a given publication (as would be the case with some materials).

Grade Level(s). Four grade/age levels are used to identify the educational level of examinees to which the document refers. These are--elementary, secondary, postsecondary and adult. For example, a life skills test designed for and used with high school students would be labeled as such. However, this reflects only the use of the test described in the document. It might be just as appropriate for others to use the test with adult students. Readers should judge for themselves whether a given testing approach is appropriate for use in contexts other than the one originally intended.

Document type tends to correlate with the specificity of this information. Theoretical or conceptual papers often are relevant to applied performance testing at several educational levels, in which case all appropriate levels are listed.

Abstract. Abstracts are written in the "indicative" style; that is, from the point of view of an impartial third party telling the reader what topic the document discusses, how it is presented, to whom it is addressed, and the author's major arguments, findings and conclusions. The CAPT abstractor is identified by the initials appearing at the end of the abstract. The author's unchanged abstract is identified as (Author); abstracts obtained from ERIC are identified as (ERIC). If abstracts from either of these sources have been substantially modified by CAPT staff, the combined authorship is indicated (e.g., Author/initials).

Suggested Users. Just as a document is written for a specific purpose (reflected by the document type code), the author also usually is addressing a particular audience. We have attempted to reflect the latter by identifying "suggested users." The list of user groups consists of the following:

* Researchers
* Testing specialists
* Curriculum specialists
* School administrators
* Teachers

For example, a report investigating the predictive validity of an APT might be oriented toward researchers and testing specialists. An actual APT which can be used in the classroom may be most appropriate for teachers. Discussions of the system-wide use of APT results are typically oriented toward curriculum specialists and school administrators.

It is somewhat presumptuous for CAPT to be making such judgments because it implies a rather stereotyped vision of these roles. The intent is only to reflect the most likely group(s) being addressed by the author, rather than the only group(s) for which the document will be useful. Therefore, the reader is encouraged to liberally interpret these designations.

Related Documents. Companion materials also cited in the bibliography are identified by author and publication date. These include materials written by the same author or materials bearing a high degree of relationship to the publication. This type of information links together authors who draw upon each others' work, allowing the bibliography user to identify groups of documents dealing with the same substantive area.

READING

DOCUMENT TYPE	AUTHOR	PAGE
THEORETICAL	O'Reilly	9
	Reder	10
	Task Force	11
APPLICATION	Cooney	8
RESEARCH	(none)	
TEST DESCRIPTION	O'Reilly	9
TEST DEVELOPMENT	Ayrer	7
	Cooney	8
	Task Force	11
BIBLIOGRAPHIES	Reder	10

5 Ayrer, J. E. Problems in the development of a test of functional literacy. Journal of Reading, 1977, 20(8), 697-705.

Content Area: Reading

Skills Tested: Following directions
Using references
Filling in forms
Gaining information

Grade Level(s): Secondary

In this non-technical article, Ayrer reviews the steps taken in developing a functional literacy test used in the Philadelphia School District. Six decision points are identified in the test construction process: stating a purpose; operationalizing the purpose; writing items; pretesting; item analysis, and setting a passing point. The unique problems encountered at each step (by virtue of the purpose and content of the test) are discussed. Ayrer's main point is that "a test is the result of a series of decisions made by a test constructor and the test cannot be evaluated properly without knowing ... what those decisions were." That is, the hidden value system built into a given test is highly relevant in test evaluation. (SS)

Suggested Users: Testing specialists
School administrators

2 Cooney, J. The Adult Competency Education Project: An experimental
5 adult basic education demonstration project. Final Report. Redwood City, CA: San Mateo County Office of Education, 1978. 52 pp.

Content Area: Reading

Skills Tested: Skills required in job-related tasks

Grade Level(s): Adult

This report describes the development of an adult competency-based curriculum in which instructional objectives are defined in terms of job-related tasks. Through interviews with employees in 100 unskilled and semi-skilled jobs, the project staff identified which skills were required on the job and elicited sample tasks requiring applicatioin of the skill. For each job, the staff then wrote 20 to 40 "competencies," containing: (1) the reason the skill is required on the job; (2) a measurable instructional objective defining the skill, and (3) a task with which to test a student's ability at the skill. A total of 400 instructional objectives were identified (the second component of the competency statement), which formed the project's curriculum. Of particular motivational value to the students was their awareness of the link between academic learning and on-the-job functioning. The authors include several observations concerning the advantages and limitations of their curriculum development effort. (SS)

Suggested Users: Curriculum specialists
School administrators

14 O'Reilly, R. P. & Schuder, R. T. Some issues in the measurement of basic competence in reading. Paper presented at the Annual Meeting of the American Educational Research Association, 1977. 51 pp.

Available from EDRS (ED 148 897).

Content Area: Reading

Skills Tested: Comprehension of reading materials encountered in everyday life

Grade Level(s): Elementary
Secondary

The content and utility of two models of reading comprehension tests, the basic skills assessment model and the multiple choice cloze (MCC) model, are discussed. The basic reading competency model assesses the ability to read or infer "basic" meanings from a range of written or symbolic communication, as is necessary for daily living in this society. This limited analysis of the basic competency model suggests some degree of positive practical impact of the test; applications of this model are illustrated. Criticisms of this model state that such a test is not theoretically based, nor objectively reproducible, nor does it yield scores that provide detailed diagnostic quidance in the instructional process. The multiple choice cloze (MCC) technique was developed as one expression of the literal comprehension construct, viewed as the basic skill underlying the reader's ability to infer explicit meanings from written language. Items in the test are objectively developed and derived from a theoretical framework, thus providing quidelines for interpreting the resulting test scores. Current developments suggest that these test results can be used to identify the kinds of materials that readers can comprehend at the literal level for specific purposes. The test also appears to offer a diagnostic capability with fairly clear-cut instructional implications. (ERIC)

Suggested Users: Researchers
Testing specialists

16 Reder, S. M., Walton, M. F., & Green, K.R. A bibliographic guide to functional literacy. Portland, OR: Assessment and Measurement Program, Northwest Regional Educational Laboratory, 1978. 61 pp.

Available from CAPT.

Content Area: Reading

Skills Tested: Functional literacy

Grade Level(s): Secondary
Postsecondary
Adult

The intent of this annotated bibliography is to summarize the literature on functional literacy originating in a variety of disciplines. The Guide is divided into five major chapters. Each focuses on a specific topic or set of issues in functional literacy, beginning with a brief overview of the major issues and references. Selected documents are then cited and annotated, describing how the substance of the document fits into the chapter's topical focus. The five chapter titles are--Literacy Policy, Definitions and Measurements, Approaches to Adult Literacy Education, Determining Literacy Requirements of Occupational and Social Activities, and Intellectual Consequences of Literacy. The bibliography reviews the major surveys of functional literacy in the United States conducted since 1970 as well as the secondary analyses and critiques of the research. Several of the documents cited are highly relevant to the development and use of applied performance measures of literacy skills. (Author/SS)

Suggested Users: Researchers
Testing specialists
Curriculum specialists (adult education)

1 Task Force on Measurement and Evaluation in the Study of English,
5 National Council of Teachers of English. Common sense and testing in English. Urbana, IL: Author, 1975. 39 pp.

Available from National Council of Teachers of English, 1111 Kenyon Road, Urbana, IL 61801. Cost: $1.50. (Stock No. 07737R)

Content Area: Reading

Skills Tested: Competence in areas of English instruction (e.g., reading, writing, speaking, listening, study skills, literature, use of media, etc.)

Grade Level(s): Elementary
Secondary
Postsecondary

This report deals with the findings of the Task Force on Measurement and Evaluation in the Study of English of NCTE and provides educators with an overview of the state-of-testing in English. The report begins with a discussion of the link between assessment and instruction in English, reviews the common uses and misuses of test, and relates tests to the various decisions that characterize the educational environment. Standardized, norm referenced and criterion referenced tests are discussed in terms of strengths, limitations and test publisher obligations. Guidelines are provided for the interpretation and use of test scores. Finally, the reader is provided with a checklist for evaluating English tests and test uses. Questions to be asked by the test user cover such issues as the appropriateness of test content, quality of the test format, characteristics of the test manual, and nature of the test score reporting procedures. The report also includes a layman's summary intended for interested citizens who may wish to explore the use of tests in English classes in their schools. Parents are provided with a list of questions to ask about the use of published tests in the classes their children are taking. (RS)

Suggested Users: Testing specialists
Curriculum specialists
School administrators
Teachers

WRITING

DOCUMENT TYPE	AUTHOR	PAGE
THEORETICAL	Brown	14
	Clemson	15
	Coffman	16
	Cooper	17
	Steele	28
APPLICATION	Fredrick	19
	National Assessment '76	24
	Klaus	21
	National Assessment '77	26
	Sekera	27
RESEARCH	Breland	13
	Clemson	15
	Huntley	20
	McColly	22
	Steele	28
TEST DESCRIPTION	Fowles	18
	Fredrick	19
	National Assessment '76	24
TEST DEVELOPMENT	Mullis	23
	National Assessment '72	25
	Steele	28
BIBLIOGRAPHIES	(none)	

3 Breland, H. M. & Gaynor, J. L. A comparison of direct and indirect assessments of writing skill. Journal of Educational Measurement, 1979, 16(2), 119-128.

Content Area: Writing

Skills Tested: Persuasive essay writing

Grade Level(s): Postsecondary

Results of an investigation comparing direct and indirect assessments of writing ability of 2000 freshman students are reported and discussed, with emphasis on the validity and reliability of each testing approach. For purposes of this study, the direct assessment involved 20-minute essays on three different topics. Each essay was rated independently by two different experienced readers using the holistic scoring method. The College Board's Test of Standard Written English was administered as the indirect measure. Results from three types of analysis show a substantial correlation between direct and indirect assessments of writing skill. The report also includes a review of past research and writing concerning direct and indirect assessment of writing skill, with arguments supporting each approach. In addition, it cites ways in which procedures for direct assessment have improved over recent years. (SS)

Suggested Users: Researchers
Testing specialists

1 Brown, R. What we know now and how we could know more about writing ability in America. Paper presented at the NIE Conference on Writing, Los Angeles, CA, June 1977. 17 pp.

Available from Dr. Rexford Brown, National Assessment of Educational Progress, 1860 Lincoln Street, Denver, CO 80295.

Content Area: Writing

Skills Tested: General writing proficiency

Grade Level(s) Elementary
Secondary
Postsecondary

The author discusses current state of writing quality in America, and suggests means for expanding the knowledge base. Intuitive and empirical bases precipitating students', teachers', and parents' awareness of student writing incompetence are explored, with emphasis on the deficiencies of objective writing tests as means for disclosing evidence of poor writing. Findings from the National Assessment of Educational Progress 1969 and 1973-74 writing assessments are discussed and compared, revealing a decline in the quality of student writing from the first to the second assessments. Methods for scoring and evaluating the student essays are described. In addition, data from the two assessments and information from objective tests are summarized, suggesting that there is little accurate, unbiased, concrete information about writing achievement in America. The author concludes with suggestions for the development of "ideal" instruments and procedures for the direct assessment of writing proficiency. (LP)

Suggested Users: Teachers
Curriculum specialists (language arts)
School administrators
Testing specialists

Related Documents: Mullis (1975)

1 Clemson, E. A study of the Basic Skills Assessment direct and
3 indirect measures of writing ability. Princeton, NJ: Basic Skills Assessment Program, Educational Testing Service, 1978. 17 pp.

Available from Basic Skills Assessment Program, Educational Testing Service, Princeton, NJ 08541.

Content Area: Writing

Skills Tested: Completing a form
Writing a business letter
Conveying information accurately
Writing creatively

Grade Level(s): Secondary

The author provided a description of part of the validation research on the Writer's Skills component of the Basic Skills Assessment battery (BSA) developed by ETS. Both the objective test component and the writing sample component are described in terms of assessment strategies and their origins in previous writing assessment research and development. Research results are reported dealing with (1) reliabilities of and interrelationships among subscores in the objective test and writing test and (2) intercorrelations between the writing sample and objective test subscores and total scores. Reliabilities are generally high, intercorrelations among subscores are generally low to moderate, and correlations between the two modes of assessment are moderate to high. The results are interpreted to mean that both direct and indirect assessment methods are useful in the domain of writing assessment. Additional research topics are outlined. (RS)

Suggested Users: Testing specialists

Related Documents: Fowles (1978)

1 Coffman, W.E. On the reliability of ratings of essay examinations in English. Research in the Teaching of English. 1971, 5(1), 24-36.

Content Area: Writing

Skills Tested: Essay writing

Grade Level(s): Secondary
Postsecondary

This paper explores ways of maximizing the reliability of the ratings of essay examinations in English. After presenting several points in defense of the use of essay tests, the author identifies several sources of error that make it difficult to achieve consistency in grading essays. Error sources included a lack of agreement among raters (interrater variability) and a lack of consistency across papers for a given rater (intrarater variability). The author suggests the use of analysis of various data analysis strategies to reveal which types of problems (error sources) are causing inconsistency in any given assessment. The paper then details an example of the application of one type of data analysis procedure and suggests several ways to reduce rating error. Suggestions include careful selection of the rating scale, careful standard-setting, rating question-by-question rather than student-by-student, and carefully reducing teacher bias in ratings. (RS)

Suggested Users: Testing specialists

1 Cooper, C. Measuring growth in writing. English Journal, 1975, 64(3), 11-120.

Content Area: Writing

Skills Tested: General writing proficiency

Grade Level(s): Secondary
Postsecondary

Cooper discusses objectives and measures for assessing a student's long-term growth in writing ability, and means for assessing the effectiveness of a school writing program. He describes ways of making data collection unobtrusive, valid, and reliable, with emphasis on teachers being free to teach objectives as they choose. Writing objectives are defined in five areas: (1) standard usage; (2) syntactic fluency; (3) writing quality; (4) willingness to write; (5) valuing writing and writers; and (6) small student-group writing workshop contributions. Cooper shows how writing instruction based on these objectives can be assessed by obtaining several complete writing samples from students. Specific methods for measuring each objective are reported. In addition, Cooper presents a complete scheme for whole-school measurement of growth in writing by ranking students. He includes suggestions for using results in instruction and research. (LP)

Suggested Users: Teachers
School administrators

4 Fowles, M. E. Manual for scoring the writing sample. Analytical scoring, holistic scoring. Princeton, NJ: Educational Testing Service, 1978. 19 pp.

Available from Basic Skills Assessment Program, Educational Testing Service, Princeton, NJ 08541. No charge.

Content Area: Writing

Skills Tested: Completing a form
Writing a business letter
Conveying information accurately
Writing creatively

Grade Level(s): Secondary

This manual covers analytical and holistic scoring procedures used in evaluating the writing exercise component of the Basic Skills Assessment Writing Program. Brief descriptions of the development and composition of the multiple choice and writing sample parts of the program are included; however, the major portion of the manual is a comprehensive guide to procedures used in a large-scale assessment of student writing. Advantages and disadvantages of both scoring methods are discussed. Instructions to the Testing Coordinator cover steps in selecting and training Chief and Assistant Chief Readers, Scorers, and Aides, as well as recommendations for scheduling scoring sessions, making room arrangements, duplicating materials, preparing test books for scoring, and arranging for security of exercise booklets. Sample writing exercises are included. Sections with instructions to Readers, Scorers, and Aides can be separated, photocopied, and given to appropriate participants involved in scoring sessions. (SS)

Suggested Users: Testing specialists
Curriculum specialists (language arts)

Related Documents: Clemson (1978)

2 Frederick, V. Writing assessment research report: A national survey.
4 Madison, WI: Wisconsin Pupil Assessment Program, Wisconsin Department of Public Instruction, 1979. 65 pp.

Content Area: Writing

Skills Tested: General writing proficiency

Grade Level(s): Elementary
Secondary

In 1979, the Wisconsin Pupil Assessment Program conducted a nationwide survey to determine the current status of statewide writing assessments to provide an informational background for others planning a writing assessment. Results of that survey are presented and discussed in this report. The survey tapped state-specific information from assessment reports, technical manuals, correspondence, and a questionnaire sent to each State Department of Education. The report includes an explanation of terms commonly associated with the assessment of writing; a brief account of the status of states' writing assessments; an individual summary of administration, used by each state that responded to the survey; a list of writing objectives assessed by various states; a summary of assessment-related problems encountered, and recommendations from states that have conducted writing assessments; and a bibliography of sources available for onsite reference. (LP)

Suggested Users: Testing specialists
School administrators

3 Huntley, R.M., Schmeiser, C.B., & Stiggins, R.J. The assessment of rhetorical proficiency: The role of objective tests and writing samples. Paper presented at the Annual Meeting of the National Council on Measurement in Education, 1979. 17 pp.

Available from CAPT. Cost: $1.70.

Content Area: Writing

Skills Tested: General writing proficiency

Grade Level(s): Postsecondary

The authors investigate the premise that objective tests can be used to validly assess language proficiency in postsecondary settings.

Using several instruments that measure language proficiency, the study examines the relationship between the American College Testing Program (ACT) English Usage Test scores and demonstrated writing proficiency. It also examines the relationships between and among other assessment instruments (an experimental objective test assessing rhetorical proficiency, the SAT-Verbal and the SAT Test of Standard Written English) and demonstrated writing proficiency. Results of the study suggest that while some of the skills emphasized in the writing assessment are measurable through objective assessment, the skills measured in the two types of assessment are not exactly the same. The authors urge further research directed toward identifying raters' possible influence on writing assessments, and pinpointing specific rhetorical tasks that can be translated into objective writing tests. (LP)

Suggested Users: Researchers
Testing specialists

Related Documents: Steele (1979)

2. Klaus, C. H., et al. Composing childhood experience: An approach to writing and learning in the elementary grades. St. Louis, MO: CEMREL, Inc., 1979. 108 pp.

Available from Jenny Skaggs, Publications Manager, CEMREL, Inc., 3120 59th Street, St. Louis, MO 63139. Cost: $3.70.

Content Area: Writing

Skills Tested: Expressive writing (role elaboration)

Grade Level(s): Elementary

This guidebook describes an approach designed to help teachers teach skill in expressive writing to elementary students. Much attention is focused on developing children's expressive writing skills through specific writing activities and exercises. In addition, the report presents a carefully developed system for evaluating student responses to these tasks using the primary trait scoring method, suggests how the evaluation system can be used to help students improve their writing, and shows how to develop a sequence of expressive writing tasks, incorporating continuous evaluation within overall instructional plans. Results of the 1969-70 and 1973-74 National Assessment of Educational Progress (NAEP) Writing Assessment are presented along with examples of writing exercises, a complete description of the Primary Trait System of scoring, and instructional comments for each of the sample items. Means for comparing classroom writing performance to NAEP results are provided.

Suggested Users: Teachers
Curriculum specialists (language arts)
School administrators

3 McColly, W. What does educational research say about the judging of writing ability. Journal of Educational Research, 1970, 64(4), 148-156.

Content Area: Writing

Skills Tested: General writing proficiency

Grade Level(s): Elementary
Secondary
Postsecondary

The author discusses the problems of evaluating student writing via objective and essay tests, emphasizing validity and reliability issues. Though both direct and indirect methods of assessing writing skills are described, the use of essay tests for judging levels of writing ability is presented as the more comprehensive measure of student writing. Validity and reliability issues are addressed through a summary of research in the areas most often found to be sources of error and variability in writing tests: (1) students/writers; (2) training of readers; (3) scoring criteria; (4) essay rating scales; (5) writing topics; (6) appearance of handwriting; (7) design and methodology of writing research; and (8) administration of writing tests. Research data from each area are reported and discussed. Inconclusive results in several areas emphasize the need for further research and indicate that unless necessary conditions are observed, a writing test should not be attempted. An addendum speaks to the availability of computer programs through which indices of the quality of writing can be analyzed to predict writing performance.

Suggested Users: Researchers
Testing specialists

5 Mullis, I. The primary trait system for scoring writing tasks. Denver, CO: National Assessment of Educational Progress, 1975. 32 pp.

Available from National Assessment of Educational Progress, 1860 Lincoln Street, Denver, CO 80295. Cost: $1.00. Also available from EDRS (ED 124 942).

Content Area: Writing

Skills Tested: Skill in writing for specific purposes

Grade Level(s): Elementary
Secondary
Postsecondary

The author presents the rationale and procedures involved in implementing the National Assessment of Educational Progress (NAEP) primary trait system for scoring writing samples. As defined here, primary trait scoring involves analyzing a piece of writing to determine whether it manifests the traits necessary to have the desired effect upon the intended audience. Sample materials and responses from the 1974 national assessment of writing are included. The author explains that primary trait scoring evolved in response to desire for a scoring method that could be explained meaningfully in reports, defined precisely enough to enable replication of scoring, and interesting and useful enough to provide worthwhile information to educational decision makers. Development of writing tasks, trait-specific scoring guides and procedures, means of identifying desirable writing skills to be measured, and procedures for systematic training of readers are all discussed. (SS)

Suggested Users: Testing specialists
Curriculum specialists (language arts)

Related Documents: Brown (1977), National Assessment of Educational Progress (1976)

2 National Assessment of Educational Progress. Expressive writing:
4 Selected results from the second national assessment of writing. (NAEP Writing Report No. 05-W-02). Denver, CO: Author, 1976. 63 pp.

Available from National Assessment of Educational Progress, 1860 Lincoln Street, Denver, CO 80295. Cost: $1.65. Also available from EDRS (ED 130 312).

Content Area: Writing

Skills Tested: Expressive writing skills

Grade Level(s): Elementary
Secondary

This NAEP report presents results for three expressive writing exercises with an analysis of various writing tendencies, and sample papers representative of various scoring categories. Following an overview of the assessment rationale, scoring system, and categorizations of students used, Chapter 1 details the first timed writing exercise: revealing personal feelings and ideas, with music as the stimulus. A second, more structured exercise requires the examinee to pretend he or she is a pair of tennis shoes, writing a story about what will be happening to them. The third exercise, the most complicated, calls for imaginative expression of feeling; the writer must elaborate a point of view based on a picture. Final observations and an appendix of revised writing objectives conclude the report. (SW)

Suggested Users: School administrators
Teachers

Related Documents: Mullis (1975), National Assessment of Educational Progress (1972)

5 National Assessment of Educational Progress. Writing Objectives. Denver, CO: Author, 1972. 40 pp.

Available from National Assessment of Educational Progress, 1860 Lincoln Street, Denver, CO 80295. Cost: $1.50. Also available from EDRS (ED 072 460).

Content Area: Writing

Skills Tested: Writing to reveal personal feelings and ideas
Writing in response to societal demands and obligations
Attitudes toward writing

Grade Level(s): Elementary
Secondary
Postsecondary

This 1972 NAEP report covers procedures employed in developing the 1965 National Assessment of Educational Progress Writing Objectives, and outlines revised writing objectives proposed for the 1973-74 National assessment. Original writing objectives developed by the Educational Testing Service include (1) demonstrates ability in writing to reveal personal feelings and ideas; (2) demonstrates ability to write in response to a wide range of societal demands and objectives; and (3) appreciates the value of writing. Revised writing objectives include detailed descriptions of objectives and subobjectives at each of four age levels (9, 13, 17 and adult). Actual writing samples are used to illustrate the type of writing called for by each objective.

Suggested Users: Teachers
Curriculum specialists (language arts)
Testing specialists
School administrators

Related Documents: Mullis (1975), Brown (1977), National Assessment of Educational Progress (1976)

2 National Assessment of Educational Progress. Write/rewrite: An assessment of revision skills. Denver, CO: Author, 1977. 29 pp.

Available from National Assessment of Educational Progress, 1860 Lincoln Street, Denver, CO 80295. Cost: $1.25. Also available from EDRS (ED 141 826).

Content Area: Writing

Skills Tested: Expository writing (scholastic)
Letter writing

Grade Level(s) Elementary
Secondary

Selected results from the second National Assessment of Writing are reported and discussed. Data are based on detailed analyses of two writing exercises. The first exercise required 9 and 13-year-olds to write and revise a school report, and the second required 17-year-olds to write and revise a letter in response to a practical, reasonably complex problem. Approximately 2500 individuals at each age level responded to one of the exercises. Samples of both writing exercises are provided, along with a description of the multiphase essay scoring system used by NAEP. An analysis of students' revision skills reveals that at all three ages, students made more stylistic, informational and mechanical changes than any other type of revision; and that overall, students' revisions had little effect on the quality of final drafts. Information about specific types of revisions made by students is broken down by geographic region, age, sex, race, parental education, and community type. Detailed comparisons between original and final drafts are also included.

Suggested Users: Teachers
Curriculum specialists (language arts)
Testing specialists
School administrators

Related Documents: National Assessment of Educational Progress (1972)

2 Sekera, C. R. 1978 Writing assessment report. Pueblo, CO: Department of Curriculum, School District No. 60, 1978. 52 pp.

Available from Mr. C. R. Sekera, Director of Language Arts, School District No. 60, P. O. Box 575, Pueblo, CO 81003. Cost $3.00.

Content Area: Writing

Skills Tested: Expressive writing
Persuasive writing

Grade Level(s): Elementary
Secondary

This report presents results from the 1978 Writing Assessment conducted by the Pueblo, Colorado School District. Writing samples obtained from students in grades 4, 6, 8, and 10 were scored holistically on a four-point scale by two readers. In grades 4, 6, and 8, students wrote compositions in response to a pictorial stimulus, describing what is happening in the picture, who the characters are, and what will happen next. The 10th grade exercises required students to react to a quote, either agreeing or disagreeing with it and supporting their point of view. In addition to training readers by using sample essays, the District developed specific scoring criteria for each of the four rating levels. Criteria charts for each writing exercise are included in the report.

Suggested Users: Teachers
Curriculum specialists (language arts)
Testing specialists
School administrators

1 Steele, J.M. The assessment of writing proficiency via qualitative
3 ratings of writing samples. Paper presented at the Annual Meeting of
5 the National Council on Measurement in Education, 1979. 9 pp.

Available from Joe M. Steele, College Outcome Measures Project, American College Testing Program, P.O. Box 168, Iowa City, IA 52243.

Content Area: Writing

Skills Tested: Persuasive writing

Grade Level(s): Postsecondary

The paper covers development of an open-ended measurement battery by the College Outcome Measurement Project (COMP) of the American College Testing Program (ACT) to assess liberal education outcomes. The COMP Writing Assessment procedure is described, and validity and reliability issues are discussed. The COMP/ACT Writing Assessment consists of three role-playing tasks introduced via audio-taped stimuli; test takers have 60 minutes to compose three samples of writing. Faculty evaluators are provided with guidelines to minimize bias in rating. Results of validity studies indicate high content validity for the writing scale and sensitivity to such issues as the nature and design of the writing task, varying levels of writing proficiency of students, and relationship of writing task to relevant adult roles. Data from reliability studies reveal a moderately high degree of interrater reliability. Studies reported here show that increasing the number of writing samples per student to three increases reliability, but increasing the number of raters beyond two does not. Use of refined training materials for raters also increases reliability. Both holistic and analytic scoring approaches are explored and the reliability of both is found to be high. (LP)

Suggested Users: Researchers
Testing specialists

Related Documents: Huntley, Schmeiser & Stiggins (1979)

SPEAKING AND LISTENING

DOCUMENT TYPE	AUTHOR	PAGE
THEORETICAL	Basssett	31
	Larson	32
	Mead	33
APPLICATION	(none)	
RESEARCH	Baldwin	30
TEST DESCRIPTION	Larson	32
TEST DEVELOPMENT	Bassett	31
BIBLIOGRAPHIES	(none)	

3 Baldwin, T.L. & Garvey, C.J. Components of accurate problem solving communications. American Educational Research Journal, 1973, 10 (1), 39-48.

Content Area: Speaking
Listening

Skills Tested: Orientation to other's point of view
Communication of essential information
Verification of solutions

Grade Level(s): Elementary

The intent of this study is to identify the components of accurate, two-person communication in a problem solving situation. It was hypothesized that three types of communication behaviors would be related to communication accuracy as measured by performance on three problem solving tasks. These communication behaviors (listed above under "skills tested") did correlate positively with the accuracy measure, accounting for 44 percent of the variance in accuracy. The research reported here represents one step toward the development of methods for instruction in and measurement of communication skills. (SS)

Suggested Users: Researchers
Testing specialists

1 Bassett, R.E., Whittington, N. & Staton-Spicer, A. The basics in
5 speaking and listening for high school graduates: What should be assessed? Communication Education, 1978, 27(4), 293-303.

Content Area: Speaking
Listening

Skills Tested: Basic communication skills (e.g., express ideas clearly and concisely, ask questions to obtain information, identify main ideas in oral messages)

Grade Level(s): Secondary

This article presents the procedures and recommendations of a Speech Communication Association task force regarding minimal speaking and listening competencies needed for high school graduation. A review of the literature related to oral communication competencies suggested three criteria for including a skill as a recommended minimum competency: it must be necessary to adult functioning; educational (i.e., capable of development through public school education), and general enough to apply to high school graduates from all American subcultures. Nearly half the article is devoted to listing the 19 competencies that meet these criteria, along with examples of how each applies in a variety of contexts: occupational; citizenship, and social/financial/health maintenance. It is recommended that the 19 competencies be used to modify or create curricula, and that they form the basis for assessment once appropriate instruments are developed. (SW)

Suggested Users: Testing specialists
Curriculum specialists
School administrators
Teachers

Related Documents: Larson, et al (1978), Mead (1977)

14 Larson, C., Backlund, P., Redmond, M. & Barbour, A. Assessing functional communication. Urbana, IL: ERIC Clearinghouse on Reading and Communication Skills, 1978. 154 pp.

Available from Speech Communication Association, 5205 Leesburg Pike, Falls Church, VA 22041. Cost: $5.00. Also available from EDRS (ED 153 275).

Content Area: Speaking
Listening

Skills Tested: Oral language skills
Communicative competence and appropriateness
Listening skills
Nonverbal sensitivity/empathic skills
Apprehension/anxiety in communication situations

Grade Level(s): Elementary
Secondary
Postsecondary

The purpose of this book is twofold. In Part I, the authors identify and describe the conceptual and methodological issues in assessing and evaluating the major components of functional communication. Part II consists of brief reviews of 90 instruments, observation and category systems, and general assessment procedures intended to measure functional communication skills. These instruments are grouped in terms of the categories listed above as "skills tested," and are further differentiated by the age for which the measure is appropriate. The 90 instruments cover a wide variety of measurement approaches, ranging from standardized tests of listening comprehension, situational tests of oral language production, rating scales, observation systems, and self-report measures. This book provides an excellent overview of the state-of-the-art in assessing speaking and listening competence. Numerous references accompany each chapter. (SS)

Suggested Users: Researchers
Testing specialists

Related Documents: Mead (1977), Bassett, et al. (1978)

15 Mead, N.A. Issues relating to a national assessment of speaking and listening skills. Paper presented at the Annual Meeting of the Speech Communication Association, 1977. 25 pp.

Available from National Assessment of Educational Progress, 1860 Lincoln Street, Denver, CO 80205. No charge. Also available from EDRS (ED 146 656).

Content Area: Speaking
Listening

Skills Tested: Informing
Controlling (persuading)
Sharing feelings
Ritualizing
Communication attitudes

Grade Level(s): Elementary
Secondary

This paper reports the work and findings of a feasibility study project concerning the large-scale assessment of speaking and listening skills. The project was jointly initiated by the National Assessment of Educational Progress and the Speech Communication Association. Three issues related to instrument development are addressed: (1) identification of the domains of communication competencies that would be assessed; (2) selection of measurement strategies which would be utilized, and (3) identification of sources of test bias, specifically those related to cultural and situational differences. The project staff developed a three-dimensional matrix, defining domain of communication competence. These dimensions are: function (informing, controlling, sharing feelings, ritualizing, and imagining); perspective (speaking/expressing and listening/recognizing), and context (formal dyad, formal group, informal dyad, and informal group). In dealing with the issue of measurement strategies, the project staff developed indirect measures of speaking skills (i.e., objective test items), direct measures of listening skills (i.e., auditory test stimuli), and laid plans for direct measures of speaking skills (i.e., performance tests). Field test results are reviewed in terms of the test bias issue. (SS)

Suggested Users: Researchers
Testing specialists
Curriculum specialists

Related Documents: Larson, et al (1978), Bassett, et al (1978)

GENERAL PROBLEM SOLVING SKILLS

DOCUMENT TYPE	AUTHOR	PAGE
THEORETICAL	McGuire	35
	McGuire, et al.	36
	Pottinger '75	37
	Pottinger '77	38
	Thorson	39
	Wearne	40
	Winter	41
	Winter, et al.	42
APPLICATION	Winter	41
	Winter, et al.	42
RESEARCH	Wearne	40
	Winter	41
	Winter, et al.	42
TEST DESCRIPTION	McGuire, et al.	36
TEST DEVELOPMENT	McGuire, et al.	36
	Wearne	40
	Winter	41
BIBLIOGRAPHIES	(none)	

1 McGuire, C. Simulation technique in the teaching and testing of problem-solving skills. Journal of Research in Science Teaching, 1976, 13(2), 89-100.

Content Area: General problem solving skills

Grade Level(s): Secondary
Postsecondary

It is the basic premise of this paper that, by imitating a sequential decision process which entails the combination of appropriate skills, simulations offer an exciting technology for both teaching and testing problem solving competencies. However, successful applications of simulations in the problem solving arena are few. To counter this, the author provides a detailed description of simulation and a discussion of several alternative simulation techniques. Alternative techniques focus on skills in data interpretation, specific problem solving skills, and interpersonal skills. Several important advantages and limitations of simulations in educational contexts are described. And a detailed discussion of issues related to simulation validity is presented, focusing on content, construct, and concurrent validity. As a summary comment, the author cites the apparent potential for problem solving simulations in medical education, and also cites the tremendous potential of simulation in research on problem solving and judgment. (RS)

Suggested Users: Testing specialists
Curriculum specialists

1 McGuire, C.H., Solomon, L.M. & Bashook, P.G. Construction and use of
4 written simulations. New York: The Psychological Corporation,
5 1976.

Content Area: General problem solving skills

Skills Tested: Problem solving and decision making in the context of real life problems

Grade Level(s): Elementary
Secondary
Postsecondary
Adult

This volume presents a comprehensive set of guidelines for the construction and use of written simulations in assessment and instruction in a variety of content areas. As defined by the authors, simulations provide a realistic representation of some aspect of the universe which helps users to better understand, manipulate, enjoy and/or predict behavior. The participant in the simulation assumes an active role as the problem solver with full control over the situation; he/she determines the general method by which the solution will be found as well as the specific steps in the problem solving sequence. Part one of the test discusses the basic concepts and uses of written simulations. Part two contains detailed step-by-step directions for designing assessment and instutitional materials that simulate decision making and problem solving. Part three describes and illustrates methods of scoring, reporting and analyzing both kinds of materials. Part four explains structural models for designing more advanced simulations of problems typically encountered in many fields. Throughout the text, the concepts, principles and recommended procedures are illustrated with examples. According to the authors, once the basic developmental technique has been mastered, it generalizes to simulation development in various contexts and modalities of application (e.g. oral, audiovisual and computer assisted). (Author/RS)

Suggested Users: Researchers
Testing specialists
Curriculum specialists

Related Documents: McGuire & Babbott (1967)

1 Pottinger, P.S. Comments and guidelines for research in competency identification, definition and measurement. Syracuse, NY: Educational Policy Research Center, Syracuse University Research Corp., 1975. 29 pp.

Available from Syracuse University Research Corp., Merrill Lane, University Heights, Syracuse, NY 13210.

Content Area: General problem solving skills

Grade Level(s): Secondary
Postsecondary

The author offers specific guidelines for research and development in postsecondary competency identification, definition and measurement. The seven specific guidelines presented call for: (1) the identification and operational definition of "new" competencies, which (2) have general significance to a wide variety of career and life outcomes; (3) have associated measures that can be easily comprehended and used by faculty and students, and (4) can be empirically linked to external (beyond-school) realities. In addition, the author advocates (5) the discovery of new ways of measuring competencies and (6) the setting of standards of performance for the awarding of credentials at levels required for entry into roles outside the academic setting. Further, he holds that (7) new attempts to define and assess learning outcomes should not be guided solely by attempts to make them functionally equivalent substitutes for traditionally assessed school achievement. Various examples of attempts to pursue these guidelines in competency definition and assessment are cited. Implications of this approach for research and educational change are explored. (RS)

Suggested Users: Researchers
Testing specialists
Curriculum specialists

Related Documents: McClelland (1975), Pottinger & Klemp (1975)

1 Pottinger, P.S. Competency assessment at school and work. Social Policy, 1977, 8(2), 35-40.

Content Area: General problem solving skills

Skills Tested: Generic competencies required for success in non-academic roles

Grade Level(s): Secondary
Postsecondary

Pottinger reviews research at the Institute for Competence Assessment on factors related to work success. The measurement and teaching of these factors is also addressed. Three strategies for identifying competence are discussed: expert opinion; job or task analysis, and job competency analysis. The first two are seen as inadequate, while the third is advocated as the method for the future. Job competence analysis is defined in detail as a procedure for eliciting information on the overt and covert (thoughts and feelings) behaviors of competent workers. A five-stage process for conducting such an analysis, with examples of application, is also presented. Three broad dimensions of performance that appear related to competence across professions are identified: cognitive processing abilities; interpersonal skills, and motivation. Each dimension is subdivided into component parts. Issues associated with the measurement of these dimensions are addressed, focusing on the distinction between cognitive processing skills and knowledge assessment. The author urges emphasis on cognitive processing skills assessment because of its greater importance in determining job competence. The use of various measurement methods beyond paper-and-pencil tests is advocated. Postsecondary educators are urged to structure curricula around these dimensions of competence. (RS)

Suggested Users: Researchers
Testing specialists
Curriculum specialists

Related Documents: Pottinger (1975), Pottinger & Klemp (1975)

1 Thorson, E. The Dennison simulation project: Formulating, introducing and evaluating curricular change. Paper presented at the Annual Meeting of the American Educational Research Association, 1977. 29 pp.

Available from EDRS (ED 152 801).

Content Area: General problem solving skills

Grade Level(s): Postsecondary

This paper addresses several issues in the use of simulation, gaming and role playing for the development of students' problem solving skills. The author's intent is to define simulation and problem solving, demonstrating their conceptual links. A major portion of the paper is devoted to describing the process of introducing and promoting simulation as an instructional tool at Dennison University. The author notes that nearly half of the faculty has used simulation exercises in their courses. The paper concludes with a discussion of procedures for validating simulation techniques and evaluating their instructional effectiveness. (SS)

Suggested Users: School administrators
Curriculum specialists

1 Wearne, D.C. Development of a test of mathematical problem solving
3 which yields a comprehension, application and problem-solving score
5 (Technical Report No. 407). Madison, WI: Research and Development Center for Cognitive Learning, University of Wisconsin, 1976. 174 pp.

Available from EDRS (ED 144 958).

Content Area: Mathematics

Skills Tested: Mathematical applications
Mathematical concepts

Grade Level(s): Elementary

A test of problem solving behavior which provides information about the mastery of the prerequisites of the problems has been developed for fourth grade children. Each problem solving question is preceded by two other questions which assess the child's understanding of the information contained in the actual question, and an application question which measures the child's knowledge of an underlying concept of the problem solving question. The study is concerned with determining whether asking multiple questions about the same unit of information affects the response to those questions, and with measuring the extent to which the questions preceding the problem solving question assess prerequisites of it. The test was administered to 600 fourth grade students in Wisconsin and the resulting data are presented. Various types of item analyses are described; reliability and content validity of the test are reported. A copy of The Problem Solving Test is appended. (ERIC)

Suggested Users: Researchers
Testing specialists

1 Winter, D.G. & McClelland, D.C. Thematic analysis: An empirically
2 derived measure of the effects of liberal arts education. Journal of
3 Educational Psychology, 1978, 70(1), 8-16.
5

Content Area: General problem solving skills

Skills Tested: Complex concept formation

Grade Level(s): Postsecondary

The authors present the rationale and development of the Test of Thematic Analysis, reflecting the ability at complex concept formation. Intended to provide a basis for measuring the effects of liberal arts education, the test requires that examinees read two groups of brief stories and formulate and articulate in writing differences between the study groups. Scoring procedures relying on score categories derived from differences between freshman and senior responses are described, and the results of cross-validation are presented. Significant freshman/senior score differences are reported for score-derivation and cross-validation samples. Results of a second independent administration in three colleges are also presented. Significant freshman/senior score differences are reported for a second liberal arts sample selected from a setting like that in which the assessment was developed. However, non-significant freshman/senior performance differences are reported for samples selected from a non-selective teachers college and a community college. Possible explanations for differences in performance patterns across institutioins are explored. Various differences between the newly developed assessment procedure and traditional tests of concept formation are discussed, and plans for follow-up research and development are outlined. (RS)

Suggested Users: Researchers
Testing specialists
Administrators (higher education)

Related Documents: Winter, Stewart & McClelland (1978)

1 Winter, D.G., Stewart, A.J., & McClelland, D.C. Grading the effects
2 of a liberal arts education. Psychology Today, September 1978,
3 68-74+.

Content Area: General problem solving skills

Skills Tested: Complex concept formation
Reasoning abilities

Grade Level(s): Postsecondary

Three attempts to assess the effect of liberal arts education are described, leading the researchers to conclude that liberal education can increase conceptual and social-emotional sophistication. The studies were motivated by perceived inadequacy of existing means to measure the impact of higher education. Each of three assessment instruments was administered to students at a traditional liberal arts college, a four-year teacher training institution, and a community college. The instruments were: (1) the Test of Thematic Analysis, measuring ability to create and express sophisticated concepts; (2) the Analysis of Argument Test probing conceptual processes and reasoning abilities, and (3) the Thematic Appreception Test, a projective personality assessment. Each instrument is described, along with scoring procedures and illustrative responses. Pronounced and significant differences in performance between freshmen and seniors across institutions are claimed on all assessments. No data are reported. Seniors are said to have outscored students in the other two institutions. Specific differences in performance patterns are detailed. (RS)

Suggested Users: Researchers
Testing Specialists
Administrators (higher education)

Related Documents: Winter & McClelland (1978)

VOCATIONAL EDUCATION

DOCUMENT TYPE	AUTHOR	PAGE
THEORETICAL	Atkins	45
	Denton	47
	Hellervik	51
	Morrison	53
APPLICATION	Hellervik	51
	School District of Philadelphia	55
RESEARCH	Bergquist	46
	Sharon	56
TEST DESCRIPTION	Atkins	45
	Fortune	49
	Hardway	50
	Leventhal	52
	School Dist. of Philadelphia	55
	Voc. Educ. Media Center	59
	West Virginia Dept. of Education	60
TEST DEVELOPMENT	Alabama Research Unit	44
	Atkins	45
	Division of Voc. Educ.	48
	Hellervik	51
	Leventhal	52
	Morrison	53
	National Center	54
	Simmons	57
	Thomas	58
BIBLIOGRAPHIES	Denton	47

5 Alabama Research Coordinating Unit for Vocational and Technical Education. Designing educational learning from task analysis. Montgomery, AL: Division of Vocational Education, Alabama State Department of Education, 1976. 52 pp.

Available from EDRS (ED 137 499).

Content Area: Vocational education

Skills Tested: Occupational skills for: alterationist, auto parts clerk, bookkeeping/accounting/payroll clerk, cosmetology, licensed practical nursing, masonry and nursery production

Grade Level(s): Secondary
Postsecondary

A project designed to develop valid performance-based curriculum materials for selected occupational programs had the following objectives: (1) to identify a common core of basic skills for seven occupational cluster areas; (2) to prepare catalogs of performance objectives and criterion referenced measures for seven occupational cluster areas; (3) to field test the catalogs on incumbent workers in the occupational areas; (4) to conduct inservice education for curriculum developers on the utilization of performance objectives catalogs; (5) to utilize the performance objectives catalogs in designing curricular materials, and (6) to disseminate the catalogs to other states for utilization in curriculum development. The project used an adaptation of the Air Force system for task analysis and performance objectives development to design the catalogs and then translate them into curricula materials. Catalogs developed addressed the occupations listed under "skills tested" above. One result of the project was a model for an integrated approach to criterion-referenced curriculum development involving a process for literature review, task analysis of incumbent workers, performance objectives development, and curriculum field testing. The following products also resulted from the projects: (1) a state-of-the-art study of the curriculum development related to each occupation selected; (2) a list of occupational tasks required for each occupation selected; (3) a catalog of performance objectives, criterion-referenced measures and performance guides for each occupation, and (4) a variety of curriculum materials for each occupation studied. (ERIC)

Suggested Users: Curriculum specialists
School administrators

Related Documents: Division of Vocational Education, Alabama State Department of Education (1978)

1 Atkins, R., O'Brien, T. W., & Feichtner, S. H. Continuation of a
4 project to develop a vocational classroom teacher's "hands-on"
5 instrument to measure entry and exit skills of the special education student for special occupations. Final report. Pittsburgh, PA: Vocational Education Program, University of Pittsburgh, 1977. 56 pp.

Available from EDRS (ED 147 550).

Content Area: Vocational education

Skills Tested: Auto mechanics skills
Food services skills

Grade Level(s): Secondary

To investigate the feasibility of developing hands-on instruments to aid classroom teachers in assessing both entering and exiting skills of the special needs students in vocational education, a continuing project at the University of Pittsburgh was conducted to meet two major objectives: (1) develop a definitive rationale for the design of a hands-on instrument by which the vocational classroom teacher could diagnose entry skills and measure exit skills of special education students and (2) design a hands-on instrument based on the above rationale for several occupational areas. The project resulted in the following outcomes: the development of a rationale and procedures for the design of the instruments, an entering instrument to diagnose auto mechanics skills, and an exiting instrument to assess competence in food services skills. The Appendix includes copies of the two tests and brief descriptions of published mechanical aptitude tests and work sample tests. (ERIC/SS)

Suggested Users: Teachers
School administrators

3 Bergquist, W.H., Jones, J.Q., Kroll, A.M. & Sharon, A.T. Exploring the needs for competency measures in eight occupational fields. Position reports of task forces. Washington, D.C.: Fund for the Improvement of Postsecondary Education, 1974. 200 pp.

Available from EDRS (ED 093 966).

Content Area: Vocational education

Skills Tested: Skills acquired through work experience

Grade Level(s): Postsecondary
Adult

These position reports describe the findings of task forces which focused on the need to translate work-related experience into degree or certificate credit at postsecondary institutions. The eight occupational fields examined included accounting, agribusiness, data processing, day care, electronics technology, management, police science and secretarial science. A task force delineated each field, identified the measurement needs of individuals and postsecondary institutions, identified and evaluated available instruments and procedures, determined the new instruments and procedures that need to be developed and suggested ways to implement new occupational assessment programs. The task force findings and recommendations are of considerable use to those institutions intending to develop and use occupational competency measures. (Author/SS)

Suggested Users: Researchers
Testing specialists
School administrators

Related Documents: Sharon, et al (1974)

16 Denton, W.T. Student evaluation in vocational and technical education. Columbus, OH: Center for Vocational and Technical Education, Ohio State University, 1973. 34 pp.

Available from EDRS (ED 089 098).

Content Area: Vocational education

Skills Tested: Achievement, aptitude & interests in vocational education

Grade Level(s): Secondary
Postsecondary

The purpose of this paper is to review some of the instruments currently used to measure student attainments and/or attitudes in vocational fields. Following a discussion of general aspects (amount of testing, level of test difficulty, and test administration) which should be considered before embarking on an evaluation program, the author provides a review of some commonly used measures, divided into achievement and aptitude tests, and interest tests. For situations for which one of the available measures is not appropriate, it may be necessary to develop a test locally. Detailed guidelines are offered to encourage this endeavor in the second half of the document; specific attention is devoted to considerations in the development of performance tests. A relatively extensive bibliography covering measurement issues in vocational education is included. (ERIC/SS)

Suggested Users: Testing specialists
Teachers

5 Division of Vocational Education, Alabama State Department of Education. Developing performance objectives and criterion-referenced measures for performance-based instruction in vocational education. Montgomery, AL: Author, 1978. 49 pp.

Available from EDRS (ED 149 041).

Content Area: Vocational education

Skills Tested: Vocational education instructional objectives

Grade Level(s): Secondary
Postsecondary

Designed to provide guidance in the development of performance objectives and criterion-referenced measures, this booklet is intended for teachers, supervisory personnel, teacher trainers, and writers involved in developing performance-based instruction. To show the relationship of performance objectives and criterion-referenced measures to the total process of instructional development, the first chapter presents a model for development, beginning with occupational analysis (which reflects those tasks workers are actually doing on the job). Chapter 2 outlines procedures and guidelines for performing the task analysis (examination of each job task to determine its component behaviors). The writing of performance objectives to specify each desired competency is covered in the third chapter under these topics: rationale; terminology; concept of measurable objectives; rules for specifying behavior; types of conditions; types of standards; determining the number of objectives required for each task, and guidelines for writing. The final step, writing of criterion-referenced measures (for measuring each competency), is detailed in chapter 4, which covers the purpose of criterion-referenced measures, characteristics of good measures, and specific guidelines for development and evaluation. Also included is a chapter on developing evaluation checklists (supplementary aids to the performance objective standards for use when the specified product or process is highly subjective). A final outline of the entire process is included as a guide for edit and review. (ERIC)

Suggested Users: Teachers
Testing specialists
Curriculum specialists

Related Documents: Alabama Research Coordinating Unit for Vocational and Technical Education (1976)

4 Fortune, J.C. Performance test for auto mechanics. Final report. Amherst, MA: Evaluation Service Center for Occupational Education, University of Massachusetts, 1972. 76 pp.

Available from EDRS (ED 097 416).

Content Area: Vocational education

Skills Tested: Auto mechanics (e.g. test and replace ignition coil, replace water pump, lubricate chassis)

Grade Level(s): Secondary
Postsecondary

This report describes the development of an item bank of performance tests in auto mechanics. Forty seven test units, each focusing on a specific repair, diagnosis or replacement task, are described in the following format: (1) test item--the task to be done; (2) unit section--piece of test equipment on which the item is to be administered; (3) actual task--describes interactions which are to occur between tester and testee; (4) time--estimate of time required to complete the test task; (5) scoring--detailed criteria to be observed by the classroom teacher; (6) record--description of camera angles from which the completed task should be photographed for central scoring, and (7) record scoring--criteria instructions for the central scorer. (Author/SS)

Suggested Users: Testing specialists (vocational education)
Curriculum specialists (vocational education)
Teachers (vocational education)

4 Hardway, J. Outboard repair. Stillwater, OK: Mid-America Vocational Curriculum Consortium, 1977. 180 pp.

Available from Mid-America Vocational Curriculum Consortium, 1515 West Sixth, Stillwater, OK 74074. Cost: $10.00. Also available from EDRS (ED 146 393).

Content Area: Vocational education

Skills Tested: Outboard motor repair

Grade Level(s): Secondary
Postsecondary

This consortium-developed instructor's manual for small engine repair (with focus on outboard motors) consists of the following nine instructional units: electrical remote control assembly; mechanical remote control assembly; tilt assemblies; exhaust housing; propeller and trim tabs; cooling system; mechanical gearcase; electrical gearcase, and fuel supply systems. Each instructional unit includes performance objectives, suggested activities for teacher and students, information sheets, assignment sheets, job sheets, tests, and answers to the tests. Performance objectives are grouped into either (1) cognitive skills, referring to knowledge required for task performance, and (2) psychomotor skills, covering actual repair tasks. The written and performance tests accompanying each unit also reflect this distinction. (ERIC/SS)

Suggested Users: Teachers
Curriculum specialists

1 Hellervik, L.W., et al. A model assessment and classification system
2 for men and women in correctional institutions. Minneapolis, MN:
5 Personnel Decisions, Inc., 1974. 147 pp.

Available from EDRS (ED 109 326).

Content Area: Vocational education

Skills Tested: Skills necessary for success in specific occupations

Grade Level(s): Adult

The report describes a manpower assessment and classification system for criminal offenders directed towards making practical training and job classification decisions. The model is not concerned with custody classifications except as they affect occupational/training possibilities. The model combines traditional procedures of vocational psychology, such as job aptitude testing and individual vocational counseling, with more recent technologies, such as life planning exercises, behavioral simulations of job situations, and the "assessment center" concept. The assessment center, the central feature of the classification model, is designed to be conducted at that time just prior to most inmates' being assigned to training programs, and is thus labeled a "Mid-Sentence Career Development Center." Offenders would be placed in a variety of behavioral simulations to reveal a profile of strengths and weaknesses to a staff composed of professionals and prison officials. Prior to release, inmates would be scheduled for a "Pre-Release Career Development Center," designed to provide inmates with critical job-seeking skills and to continue the life work planning program begun earlier. An evaluation design is included. A site visit protocol form, descriptive data from an inmate survey, information on the assessment center, life planning activities, and a discussion of work samples are appended. (ERIC)

Suggested Users: Testing specialists
Curriculum specialists (vocational education)

4 Leventhal, A. & McCormack, J. E. Educational evaluation and planning
5 package. Volume 3. Vocational skills. Medford, MA: Massachusetts Center for Program Development and Evaluation, 1976. 67 pp.

Available from EDRS (ED 147 323)

Content Area: Vocational education

Skills Tested: Vocational competencies and prerequisite skills (e.g., motor development, work attitudes, work skills, math/measurement)

Grade Level(s): Elementary
Secondary

The Education Evaluation and Planning Package provides a performance statement check list approach to the comprehensive educational evaluation required by Massachusetts law for special education students. The vocational area of this package is intended to be used to assess various skills necessary to hold a job. There are four components of this area: (1) the Vocational Screening Assessment, which provides an overview of skills listed and an opportunity to determine the vocational sub-areas which require in-depth evaluation; (2) the Vocational Performance Statements, which allow an extensive evaluation of specific vocational performance; (3) the Next Step Suggestions, which facilitate task sequencing and complimentary activity selection, and which include a task analysis chart, skill cluster chart and three lists of prerequisite program skills, and (4) the Objectives Worksheet, which aids in the translation of performance statements into behavioral objectives. (ERIC)

Suggested Users: Teachers
Curriculum specialists
Testing specialists

15 Morrison, E.J. & Lecznar, W.B. Development and evaluation of an experimental curriculum for the New Quincy (Mass.) Vocational-Technical School. The roles, characteristics and development procedures for measures of individual achievement. Pittsburgh, PA: American Institute for Research, 1966. 35 pp.

Available from EDRS (ED 024 753).

Content Area: Vocational education

Grade Level(s): Secondary

The authors discuss three aspects of the measurement of student performance in vocational education. First, several roles of performance measurement are identified and discussed (i.e., diagnosis, achievement demonstration, occupational certification, verifying retention, motivating students, sequencing instruction, and curriculum evaluation). Second, the report addresses the desired characteristics of the measures in relation to the types of decisions facilitated, and in terms of validity, reliability and scoring. Finally, the authors briefly consider topics in test development. An Appendix provides a procedural guide for test item development. (SS)

Suggested Users: Testing specialists
Teachers

5 National Center for Research in Vocational Education. Assess student performance: Skills. Module D-4, Professional teacher education module series. Columbus, OH: Author, 1977. 32 pp.

Available from American Association for Vocational Instructional Materials, 120 Engineering Center, Univerity of Georgia, Athens, GA 30602. Cost: $1.60. Also available from EDRS (ED 149 097).

Content Area: Vocational Education

Skills Tested: Teacher competencies in test construction and student evaluation

Grade Level(s): Postsecondary
Adult

This fourth in a series of six learning modules on instructional evaluation is designed to give secondary and postsecondary vocational teachers help in devising and administering evaulation devices for assessing student performance in an occupational skills area. The terminal objective for the module is to assess student psychomotor (skills) performance in an actual school situation. Introductory sections relate the competency dealt with in this module to others in the program and list both the enabling objectives for the three learning experiences and the resources required. Materials in the learning experiences include required reading, self-check quiz, model answers, performance checklists, and the teacher performance assessment form for use in evaluation of the terminal objective. (The modules on instructional evaluation are part of a larger series of 100 performance-based teacher education (PBTE) self-contained learning packages for use in preservice or inservice training of teachers in all occupational areas. Each of the field-tested modules focuses on the development of one or more specific professional competencies identified through research as important to vocational teachers. Materials are designed for use by teachers, either on an invidivual or group basis, working under the direction of one or more resource persons/instructors.) (ERIC)

Suggested Users: Teachers

2 School District of Philadelphia. Evaluation of personalized,
4 individualized, vocational occupations training. Final report. Philadelphia, PA: Author, 1977. 85 pp.

Available from EDRS (ED 142 703).

Content Area: Vocational education

Skills Tested: Industrial electricity (trouble-shooting), automotive mechanics, machine shop skills, nursing skills

Grade Level(s): Secondary

A study was conducted to determine whether or not the Personalized, Individualized, Vocational Occupations Training (PIVOT) materials developed by the School District of Philadelphia were capable of developing entry-level competency in secondary school students in a variety of educational settings and subject areas (nurse's aide, industrial electricity, automotive mechanics, and machine tool trades). Experimental classes, using the PIVOT materials, were taught by means of individual sound-on-slide projectors, while control classes were taught the same material by conventional methods. Comparison of rates of success on a criterion task in each subject area proved the PIVOT method capable of developing entry-level competency in each setting. No significant differences were detected however between effects of the PIVOT materials and conventional methods except for educable mentally retarded students, who learned significantly better with the PIVOT materials. Repetition of the experiment with larger groups of students is recommended. An Appendix contains copies of the performance test student instructions, task descriptions and examiners' rating checklists. (Author/SS)

Suggested Users: Researchers
Curriculum specialists

3 Sharon, A.T., Jones, J.Q. and Bergquist, W.H. Planning the development of measurement and evaluation systems for use in occupational programs at postsecondary institutions. Final report. Princeton, NJ: Educational Testing Service, 1974. 58 pp.

Available from EDRS (ED 096 340).

Content Area: Vocational education

Skills Tested: Skills and competencies acquired through work experience

Grade Level(s): Postsecondary
Adult

This report presents the findings and conclusions of a study to explore the needs for occupational competency assessment instruments. The primary need was identified as the measurement of work-related experience for the purpose of awarding credit toward degrees in postsecondary institutions. For each of eight occupational fields (accounting, agribusiness, data processing, day care, electronics technology, management, police science and secretarial science), the following questions were addressed: (1) What are the measurement needs of both institutioins and individuals? (2) What assessment needs are being met with existing instruments? (3) What types of new instruments and procedures need to be developed? and (4) What are ways to implement new occupational assessment programs? In most fields, existing measures were found to be inadequate for the purpose of awarding degree credit to individuals with work experience. The types of assessment procedures proposed include paper-and-pencil tests of job knowledge, performance tests (work samples), situational exercises, and self-assessment techniques. (SS)

Suggested Users: Researchers
Testing specialists
School administrators

Related Documents: Bergquist, et al (1974)

5 Simmons, K.L. Developing performance tests. Self-paced instructional module (Module No. VIII-D). Jackson, MS: Division of Vocational-Technical Education, Mississippi Department of Education, 1976. 23 pp.

Available from Coordinator of Industry Services, Research and Curriculum Unit for Vocational-Technical Education, College of Education, Mississippi State, MS 39762. Also available from EDRS (ED 141 555).

Content Area: Vocational education

Skills Tested: Occupational skills

Grade Level(s): Secondary
Postsecondary
Adult

This document offers practical guidelines for developing performance tests for the measurement of occupational skills. Suggestions are offered in the areas of specifying performance objectives, deciding on the use of process vs. product assessment procedures, and determining scoring criteria. Appendices include a sample performance objective, performance test (competency), process evaluation checklist, and product evaluation checklist. (SS)

Suggested Users: Teachers
Testing specialists

5 Thomas, H. B. Data-based locally directed evaluation of vocational education programs. Component 6. Evaluation of occupational competencies. Tallahassee, FL: Program of Vocational Education, Florida State University, 1977. 40 pp.

Available from EDRS (ED 147 452)

Content Area: Vocational education

Skills Tested: Vocational competencies

Grade Level(s): Secondary
Postsecondary

This document describes three steps in the evaluation of vocational education student outcomes: (1) identification of competencies needed for successful employment; (2) measurement of student competencies, and (3) description of the discrepancies between items (1) and (2). In addition to providing procedural guidelines, the author also includes sample job descriptions, task listings and performance rating sheets. (SS)

Suggested Users: Teachers
Testing specialists
School administrators

4 Vocational Education Media Center, Clemson University. Plumbing. A catalog of performance objectives, criterion-referenced measures and performance guides. Clemson, SC: Author, 1977. 225 pp.

Available from EDRS (ED 146 437).

Content Area: Vocational education

Skills Tested: Plumbing duties (e.g., blueprint reading, preparation and joining of pipes, installing fixtures)

Grade Level(s): Secondary
Postsecondary

Adapted from the Vocational-Technical Education Consortium of States (V-TECS) catalog, this comprehensive collection of performance objectives, performance guides, criterion-referenced measures, and other data relating to construction plumbing and maintenance plumbing was prepared for use in vocational programs in South Carolina. Each performance objective contains the condition under which the student will perform the objective, the performance required of the student after instruction has taken place, and a job-relevant standard for measuring successful performance of the objective. The source of the standard for each objective is documented from one of the following three sources: job-based information provided in technical manuals, certification requirements, or other germane literature; the level of performance agreed upon by incumbent workers and supervisors who served on the writing team or as consultants to the team, and the subject matter specialists who served on the writing team. The source of the standard is identified in parentheses after each performance objective. A criterion-referenced measure follows each performance objective and is designed to test student achievement of the objective. The performance guides which accompany most of the objectives and measures are procedural steps identified as subordinate to task performance. Only one performance guide is given per item. Literature sources and a cross-reference table are included in the Appendices. (ERIC)

Suggested Users: Teachers
Testing specialists

4 West Virginia Department of Education. Upgrading mine electricians in the use of solid state electrical controls. Student curriculum. Charleston, WV: Author, 1977. 560 pp.

Available from EDRS (ED 150 335).

Content Area: Vocational education

Skills Tested: Electricians' skills

Grade Level(s): Secondary
Postsecondary
Adult

Twenty-one competency-based instructional units are included in this solid state electrical controls curriculum. Each unit contains one or more student competency sheets with necessary attachments or handouts, study questions, experiments, troubleshooting problems, and criterion-referenced tests. A program pretest and general student directions precede the instructional units. A teacher's guide accompanies this document under separate cover. Although the instructional units and tests were developed for mine electrician vocational programs, the skills covered in these materials are transferrable to a variety of other electricians' occupations. (ERIC/SS)

Suggested Users: Curriculum specialists
Testing specialists
Teachers

EXPERIENTIAL LEARNING

DOCUMENT TYPE	AUTHOR	PAGE
THEORETICAL	Bailey	62
	Cavanaugh	63
	Hoyt	64
	Knapp	65
	McClure	66
	McClure, et al.	67
	NASSP	68
	Willingham	70
APPLICATION	Bailey	62
	Cavanaugh	63
	McClure	66
	McClure, et al.	67
	NASSP	68
RESEARCH	(none)	
TEST DESCRIPTION	Cavanaugh	63
	McClure, et al.	67
TEST DEVELOPMENT	Knapp	65
	McClure, et al.	67
	Willingham	70
BIBLIOGRAPHIES	McClure, et al.	67
	NASSP	68
	Stutz	69

Bailey, S.K., Macy, F.U., & Vickers, D.F. Alernative paths to the high school diploma. Reston, VA: National Association of Secondary School Principals, 1973.

Available from National Association of Secondary School Principals, 1904 Association Drive, Reston, VA 22091. Cost: $2.00. (Orders totaling less than $10.00 must be prepaid.)

Content Area: Experiential learning

Skills Tested: Basic skills
General knowledge
Social and political skills
Personal and career planning skills

This monograph presents a design for a "regional learning service," with programs leading to an external high school diploma. The authors define target populations, community learning resources, new independent learning techniques, and strategies for putting the design into action. Four minimum requirements for the external diploma are suggested: basic skills; general knowledge; social and political skills, and personal and career planning skills. It is noted that evaluation can be conducted by self, peers, qualified persons such as job supervisors and assessment evaluators, by standard or specialized individual examinations, and by such "proofs" of learning as products or examples of applied skills. Three appendices describe experiential learning programs and diploma requirements in New York. (SW)

Suggested Users: Curriculum specialists
School administrators
Teachers

Related Documents: National Association of Secondary School Principals (1974)

1 Cavanaugh, W., Nathan, J. & Rudquist, D. St. Paul Open School
2 competence-based graduation process. St. Paul, MN: St. Paul Public
4 Schools, 1977. 150 pp.

Available from Developer Demonstration Project, St. Paul Open School, 97 East Central Avenue, St. Paul, MN 55101.

Content Area: Experiential learning

Skills Tested:
- Job seeking skills
- Community involvement
- Consumer awareness
- Cultural awareness
- Information finding
- Personal and interpersonal skills

Grade Level(s): Secondary

This practical guide to schoolwide use of applied performance measures contains a variety of descriptive materials as well as advice on developing and implementing graduation requirements that call for students to demonstrate both theoretical knowledge and its real life application. Actual examples of the processes used to certify student competence include the written information and checklist given students regarding the six broad competencies required for graduation, a memo with an example on how staff and community members are to validate student competence, and the final math exam, the only paper-and-pencil test required for graduation. Also included are advice regarding community involvement and parent/student/advisor orientation; an argument against the use of paper-and-pencil achievement tests; a newspaper article explaining competency testing, and brief descriptions of ten schools having exemplary competence-based graduation programs. Additional supporting materials include a survey of graduates, an interview with three students, and "graduation packets" from three students containing completed documentation of competency attainment. (SW)

Suggested Users:
- School administrators
- Curriculum specialists
- Teachers

1 Hoyt, D.P. Evaluating learning from non-traditional contexts. Washington, D.C.: Office on Educational Credit, American Council on Education, 1975. 17 pp.

Content Area: Experiential learning

Grade Level(s): Postsecondary

For various specific reasons cited in the paper, the author concludes that individual postsecondary institutions are incapable of developing their own instruments or techniques for assessing experiential learning or learning that occurs in a nontraditional setting and that the developers of such instruments and techniques are in need of guidelines and standards of acceptable practice. Therefore, the author proposes that the American Council on Education's (ACE) Commission on Educational Credit develop such guidelines and standards and he proposes that the ACE Office on Educational Credit implement and administer those standards. According to the plan outlined, the standards would be modeled after the APA, AERA, NCME Standard for Educational and Psychological Tests and would therefore lead to the evaluation of performance appraisals in terms of availability of an assessment manual, validity, reliability, security, currency, and interpretation. A plan for the implementation of the standards is suggested, including roles for measurement experts and content experts--and providing for the dissemination of high-quality tests to all interested users. (RS)

Suggested Users: Testing specialists
Administrators

1 Knapp, J., & Sharon, A. A compendium of assessment techniques.
5 Columbia, MD: Council for the Advancement of Experiential Learning, 1975. 51 pp.

Available from Council for the Advancement of Experiential Learning, American City Building, Suite 403, Columbia, MD 21044. Cost: $3.50. Also available from EDRS (ED 148 842), microfiche only.

Content Area: Experiential learning

Skills Tested: Experiential learning outcomes

Grade Level(s): Postsecondary

This publication discusses a variety of techniques appropriate for assessing of experiential learning, grouping them according to degree of realism, from work samples through simulations, assessment center techniques and essay examinations, to objective written examinations. The final chapters cover several methods for obtaining data by which to evaluate student performance, including student interviews, self-assessment and product assessment. Discussion of each major assessment technique contains the following sections: (1) overall description of the mode of assessment; (2) an example of the use of the technique in a specific setting; (3) procedures in test development; (4) technical considerations; (5) appropriateness, feasibility and cost of the technique in assessing experiential learning, and (6) references related to the assessment technique. (SW)

Suggested Users: Testing specialists
Teachers

Related Documents: Stutz & Knapp (1977, 1978), Willingham (1977)

1 McClure, L. Oregon students are learning in the community. Oregon
2 School Study Council Bulletin, 1978, 21(9), 1-29.

Available from Oregon School Study Council, 124 College of Education, University of Oregon, Eugene, OR 97403. Cost: $2.00 ($1.50 if prepaid). 10% discount for 10 or more copies.

Content Area: Experiential learning

Grade Level(s): Secondary

The author's main point, that experience-based education is an effective approach--is supported through argument, examples of current application, and an illustration showing how one community site can offer a multitude of learning experiences. In the first half of the report, the author justifies experiential learning on the basis of its distinguishing characteristics and benefits to the student. The report describes several types of experiential learning programs existing in Oregon and provides names and addresses of contact persons who can provide the reader with more detailed information. These approaches range from bringing resource persons into the classroom to vocational work experience programs, to action and service-learning programs (e.g., the Executive High School Internship Program). The concluding chapter illustrates how a city planning office can foster skills in 42 different fields of study. A 66-item bibliography is provided. (SW)

Suggested Users: School administrators
Teachers

Related Documents: McClure, Cook, & Thompson (1978)

McClure, L., Cook, S.C., & Thompson, V. Experience-based learning: How to make the community your classroom (2nd ed.). Portland, OR: Northwest Regional Educational Laboratory, 1978. 260 pp.

Available from Office of Marketing, Northwest Regional Educational Laboratory, 710 S.W. Second Avenue, Portland, OR 97204. Cost: $10.50.

Content Area: Experiential learning

Skills Tested:
- Critical thinking
- Functional citizenship
- Personal/social development
- Creative development
- Scientific investigation

An introduction to individualized career education, replete with sample materials, this guidebook presents practical, tested instructional techniques applicable to any subject area. The authors introduce experience-based learning, suggesting four techniques for structuring it and ways to analyze off-campus resources for their learning potential. Next they describe a step-by-step procedure for planning and writing student projects and locating and involving community resource people. The final chapter offers suggestions for managing the process. Twenty five sample student learning projects are included in Appendix A; Appendix B offers an annotated bibliography and alphabetical listing of references; Appendix C briefly describes related materials available from the publisher. (SW)

Suggested Users:
- Curriculum specialists
- School administrators
- Teachers

Related Documents: McClure (1978)

1 National Association of Secondary School Principals. Twenty-five
2 action learning schools. Reston, VA: Author, 1974. 43 pp.
6

Available from National Association of Secondary School Principals, 1904 Association Dr., Reston, VA 22091. Cost: $3.00.

Content Area: Experiential learning

Skills Tested: Life skills
Work-related competencies
Motivational characteristics

Grade Level(s): Secondary

Action-learning, the opportunity for students to participate in the community as paid or volunteer workers, is said to be a rapidly developing movement in secondary education. Data are cited on the growth of the movement, which is designed to provide a framework for an integrated, interdisciplinary curriculum. Philosophical links between action-learning and other school reform efforts are described, together with key steps in the implementation of action-learning programs and expected future developments. To illustrate the current status of action-learning in secondary education, 25 exemplary action-learning programs are profiled. Each is identified with school name, address, principal and enrollment. Detailed information is presented on the enrollment, grade level, time commitment, credit and pay status of both vocational or work-related programs and community or school service programs in each school. The paper includes examples of agencies served and regular school courses that encourage or require off-campus experiences. Experiences offered by each program are also described. (RS)

Suggested Users: School administrators
Curriculum specialists
Teachers

Related Documents: Bailey, et al. (1973)

6 Stutz, J.P., & Knapp, J. Experiential learning: An annotated literature guide. Columbia, MD: Council for the Advancement of Experiential Learning, 1977.

Stutz, J.P., & Knapp, J. Experiential learning: An annotated literature guide. 1978 Supplement. Columbia, MD: Council for the Advancement of Experiential Learning, 1978.

Available from CAEL, American City Building, Suite 403, Columbia, MD 21044. Cost: $3.50 each or $6.00 if both are ordered.

Content Area: Experiential learning

Skills Tested: Skills attained in sponsored or non-sponsored community or work-based settings

Grade Level(s): Secondary
Postsecondary
Adult

These two annotated bibliographies cite a total of 460 publications related to experiential learning and its assessment. The bibliographies each are organized in two parts: Part A includes materials on the rationale and history of experiential learning, types of programs, program planning and implementation, program evaluation and quality assurance, faculty resources, and financing. Topics covered in Part B are organized in terms of the six stages in the assessment of experiential learning: defining the learning; articulating it to an educational goal; documenting the learning; measuring its nature and extent; evaluating the learning in terms of acceptable standards, and transcribing credit in a suitable record system. The 1978 Supplement also contains a list of additional unannotated references and a subject index. Both bibliographies are quite well organized, with an excellent cross-referencing system that identifies documents falling in more than one category. Many documents related to applied performance testing are cited. (SS)

Suggested Users: Teachers
Curriculum specialists
Testing specialists
School administrators

Related Documents: Knapp & Sharon (1975), Willingham (1977)

1 Willingham, W.W. Principles of good practice in assessing
5 experiential learning. Columbia, MD: Council for the Advancement of Experiential Learning, 1977. 68 pp.

Available from Council for the Advancement of Experiential Learning, American City Building, Suite 208, Columbia, MD 21044. Cost: $3.00.

Content Area: Experiential learning

Skills Tested: Competencies acquired in non-academic settings

Grade Level(s): Postsecondary

This report represents a synthesis of the guidelines and principles of sound assessment identified in the 26 CAEL reports and handbooks that preceded it. The goal of CAEL and this guidebook is to produce standard assessment techniques for use in assessing experiential learning. After providing an overview of CAEL, which covers the nature of the assessment task and the functions of assessment in this domain, the author outlines an 11-item checklist of good practices in assessing experiential learning. The checklist covers practices in the assessment development process and practices in administration of experiential assessment. First, in the area of assessment development, guidelines are presented for identifying, articulating, documenting, measuring, evaluating, and transcribing learning. Second, basic principles in the effective implementation of assessment are outlined, dealing with policy matters, communication, assessor preparation, cost factors kand quality assurance considerations. Appended to the report is an annotated bibliography of all preceding CAEL publications. (RS)

Suggested Users: Testing specialists
Curriculum specialists
Administrators
Teachers

Related Documents: Stutz & Knapp (1977, 1978), Knapp & Sharon (1975)

LIFE SKILLS

DOCUMENT TYPE	AUTHOR	PAGE
THEORETICAL	Anderson	72
	Bunch	73
	McClelland	74
	Pottinger	75
	Schalock	76
	Schenck	77
	Skellings	78
APPLICATION	Anderson	72
RESEARCH	Anderson	72
	Skellings	78
TEST DESCRIPTION	Skellings	78
TEST DEVELOPMENT	Pottinger	75
	Schenck	77
	Skellings	78
BIBLIOGRAPHIES	(none)	

1 Anderson, C.R. An experiment in behavioral learning in a consumer
2 credit game. Simulation and Games, 1970, 1(1), 43-54.
3

Content Area: Life skills

Skills Tested: Knowledge related to the use of installment credit

Grade Level(s): Secondary

This study was designed to compare the instructional effectiveness of a simulation learning game to that of conventional classroom techniques. The research hypothesis was that students taught to use installment credit through a simulation game would outscore those taught in a classroom on various outcome measures because of the depth of involvement provided by the game. Mode of instruction served as the independent variable, while dependent variables included: (1) intelligence; (2) a paper-and-pencil knowledge test, and (3) a simulation exercise in the use of credit. Psychometric characteristics of each dependent measure are presented. A series of univariate F-tests comparing level and variation of performance across simulation and classroom treatments on each dependent variable reveals no statistically significant differences in performance. Subsequent analysis of performance by sex and program of study reveal differences that are discussed. Implication of the study for instruction through simulation are also discussed. (RS)

Suggested Users: Researchers
Testing specialists
Curriculum specialists
Teachers

1 Bunch, M.B. Making decisions about adult learners based on performance on functional competency measures. Paper presented at the Annual Adult Education Research Conference, San Antonio, TX, 1978.

Available from EDRS (ED 154 137).

Content Area: Life skills

Skills Tested: Adult performance level objectives

Grade Level(s): Adult

The validity and dependability of functional competency tests for adults are examined as they relate to the information needs of instructional decision makers. Test data from the Adult Performance Level (APL) Program (funded by the U.S. Office of Education at the University of Texas at Austin) is used to illustrate key points. In the discussion of validity, the importance of a test's demonstrated relevance to functional competency is discussed in terms of the definitions of the competency. Issues of content vs. criterion validity are examined particularly with reference to the APL study. Some of the problems inherent in setting and applying cutoffs (points on a scale of scores which define levels of competence) are then discussed, and the author reviews several procedures to aid in setting and adjusting cutoffs (those used by Nedelsky and by Emrick, and Bayesian techniques used by Northcutt). In the discussion of dependability (the degree to which scores are replicable) the author reviews briefly the work of Bob Brennan and Mike Kane (based on that of Cronbach and others) in the area of defining and assessing psychometric properties of criterion-referenced tests. In conclusion it is pointed out that the instructional decision-maker may raise or lower a cutoff as information justifies such action, but that there will be instances in which trade-offs between dependability and validity may become necessary. (ERIC)

Suggested Users: Researchers
Testing specialists

1 McClelland, D.C. Testing for competence rather than for "intelligence." American Psychologist, 1973, 28(1), 1-14.

Content Area: Life skills

Skills Tested: Generic competencies required for success in non-academic tasks

Grade Level(s): Secondary
Postsecondary
Adult

The author reviews the main lines of evidence for the validity of intelligence and aptitude tests and draws some inferences from this review as to new lines test developers might pursue in the future. Claiming that educators and society in general have blindly assumed a relationship between intelligence and life success, despite evidence calling this relationship into question, the author reviews several studies discounting any relationship and offers alternative interpretations of research that do demonstrate such a relationship. Power and social class are seen as key factors in explaining the correlations reported. As an alternative to the assessment of intelligence, the author suggests developing tests that: (1) sample the domain of life skills beyond academic skills; (2) reflect changes in what an individual has learned; (3) involve clusters of life-relevant outcomes of education (e.g. communication skills, patience, and moderate goal setting); (4) test operant as well as respondent behavior (i.e. require responses in less structured situations than are normally found in a single objective test item), and (5) test operant thought patterns in such a way as to maximize the generalizability of results. The author holds that tests developed according to these five criteria will have the potential to provide students and teachers the foundation for maximizing the effectiveness of the teaching-learning process. (RS)

Suggested Users: Researchers
Testing specialists
Curriculum specialists

Related Documents: Pottinger (1975), Pottinger & Klemp (1975)

1 Pottinger, P.S. & Klemp, G.O. Final report to the Fund for the
5 Improvement of Postsecondary Education. Boston, MA: McBer & Co., 1975. 39 pp.

Available from Institute for Competence Assessment, McBer & Co., 137 Newbury Street, Boston, MA 02116. Cost: $1.50. Also available from EDRS (ED 134 540).

Content Area: Life skills

Skills Tested: Generic competencies required for success in non-academic roles

Grade Level(s): Postsecondary

This document reports efforts to address some of the problems of competency-based assessment by developing and utilizing unique measures of competence. Seven conceptual guidelines are identified for test development and utilization: (1) new competencies must be identified and operationally defined; (2) new competencies should have general significance to a wide variety of career and life outcomes; (3) new definitions of competencies and measures developed for their assessment should be easy for faculty and students to understand; (4) competencies should be empirically linked to external realities; (5) the discovery of new ways of measuring competencies should acknowledge levels of performance required for entry into roles outside of academic settings; (6) standards for awarding credentials should acknowledge levels of performance required for entry into roles outside of academic settings, and (7) new attempts to define and assess learning outcomes should not be guided solely by attempts to make them functionally equivalent substitutes for traditionally assessed school achievement. A number of measures were developed along these guidelines; they are organized according to three outcome domains--cognitive, effective and social. Descriptions of these measures are presented, and their applicability for competency-based education and use in postsecondary institutions is discussed. Finally, the critical concept of the meaning of measurement is discussed along with some additional problems to be faced by educators, researchers, and funding agencies if the problems of assessment in higher education are to be adequately redressed. (ERIC)

Suggested Users: Testing specialists
Curriculum specialists

Related Documents: McClelland (1973), Pottinger (1975)

1 Schalock, H.D. How can competencies be assessed? Issues in role based assessment. In R. Nickse & L. McClure (Eds.), Competency based education: Beyond minimum competency testing. New York: Teachers' College Press, in press.

Content Area: Life skills

Skills Tested: Adult role competence

Grade Level(s): Secondary
Postsecondary

The author briefly reviews the literature and identifies key issues, such as the importance of operationally defining desired outcomes, associated with developing competency based assessment programs. According to the author, it is far easier to define outcomes for reading, writing and computation than for being a parent, learner or consumer. Yet accurate specifications of such roles are critical. The author cites key issues surrounding the selection of specific roles and indicators of performance that could be prescribed as criteria for judgment. He notes the importance of deciding the context of assessment, and the level of performance desired or expected. In addition, he spells out conditions that affect the assessment of role performance, including the problem of designing programs for assessment based on roles when neither the roles themselves nor the conditions within which they are practiced remain constant. Among the vital considerations covered are real-life and simulated conditions, selecting assessors to evaluate performance, determining how many samples of a particular behavior are sufficient to verify mastery, and building in safeguards against rater bias to assure reliable and valid judgments. (Author/RS)

Suggested Users: School administrators
Testing specialists
Curriculum specialists
Teachers

1 Schenck, E.A. A guide to identifying high school graduation
5 competencies: Issues and examples. Portland, OR: Northwest Regional Educational Laboratory, 1978.

Available from Office of Marketing, Northwest Regional Educational Laboratory, 710 S.W. Second Ave., Portland, OR 97204. Cost: $6.50.

Content Area: Life skills

Skills Tested: Competencies in communication, computation, technology, health, citizenship, consumer economics, and career education

Grade Level(s): Secondary

This guide is organized into two sections: discussion of issues to be addressed in identifying competencies, and a set of 77 graduation competency statements which illustrate the kinds of outcomes being adopted by school systems as graduation requirements. Useful to those concerned with identifying, selecting, and adopting competencies necessary for students' graduation, the guide addresses such questions as the following: What kinds of knowledge, skills and attitudes should be included in graduation competencies? How general or specific should a competency be? Who should be involved in drafting and adopting competencies? The first section addresses three specific topics: (1) identifying important questions likely to arise when establishing competencies; (2) exploring alternative answers to those questions, and (3) understanding how the authors addressed those questions when developing the set of illustrative competencies. Those 77 competency statements composing the bulk of this document are categorized under seven headings: communication; computation; technology; health; citizenship; consumer education, and career education. Each competency offers interpretive information regarding related traditional curriculum programs, related Oregon competency areas, and examples of life-role-related performance. The guide also addresses issues of measuring and promoting competency attainment, and conducting instructional management (diagnosis?). (SW)

Suggested Users: School administrators
Teachers

1 Skellings, L.N. The development of a criterion-referenced functional
3 literacy test for Miami-Dade students. Unpublished doctoral
4 dissertation, Nova University, 1977. 187 pp.
5

Available from EDRS (ED 142 256).

Content Area: Life skills

Skills Tested:
- Filling out forms
- Interpreting schedules
- Cross-referencing
- Reading labels
- Interpreting legal documents
- Following written directions
- Using telephone directories
- Reading maps
- Locating reference or textbook information
- Reading advertisements

Grade Level(s): Postsecondary

The purpose of this research study was to develop and evaluate a test of functional literacy for use with students at Miami-Dade Community College. The author describes steps in test development, pilot testing, item analysis, and external review which led to the test's revision. Test evaluation criteria proposed by Nafziger, et al. in Tests of Functional Adult Literacy (1975) are used in evaluating the test. The final version was administered to 239 students in a concurrent validity study (the Nelson-Denny Reading Test and English composition course grades were the other two measures). The test consisted of 40 multiple-choice items covering reading skills in the categories listed as "skills tested" above. Copies of both versions of the test are included in the Appendix. (SS)

Suggested Users:
- Researchers
- Testing specialists
- Curriculum specialists
- School administrators
- Teachers

PROFESSIONAL COMPETENCE

DOCUMENT TYPE	AUTHOR (PAGE)			
	Education	Managerial Skills	Medical Fields	Skilled Trades
THEORETICAL	Bolton (80) Cyrs & Dobbert (83) Cyrs & Grussing (84) Cruikshank (82) Quirk (86)	Cohen (87) Dunnette (89) Finkle (90) Howard (92) Jacobs (93) MacKinnon '75 (95) MacKinnon '74 (96)	Andrew (100) Andrew, et al (101) Cyrs & Grussing (102) Kelley (104) Levine (106) McGuire (107) Van Wort (109)	Fiks (111) Foley (112)
APPLICATION	Bolton (80) Carey (81) Cyrs & Grussing (84) Nova (85)	Deluzain (88) Jeswald (94) MacKinnon '74 (96) Rice (98) Uretsky (99)	Andrew, et al (101) Lamont (105) Levine (106) McGuire (107) Van Wart (109) Williamson (110)	
RESEARCH	Carey (81)	Cohen (87) Dunnette (89) Greenwood (91) Howard (92) MacKinnon '75 (95)	Andrew, et al (101) ETS (103) Lamont (105) Levine (106) Williamson (110)	Fiks (111) Foley (112) Schmidt(114)
TEST DESCRIPTION		Deluzain (88)	ETS (103) National Hwy. (108)	Fiks (111) Glaser (112)
TEST DEVELOPMENT	Quirk (86)	Deluzain (88) Jacobs (93) MacKinnon '75 (95) Masterson (97)	Andrew (100) Andrew, et al (101) ETS (103) Kelley (104)	Fiks (111) Glaser (112)
BIBLIOGRAPHIES	(none)			

1 Bolton, D.L. (Ed.) The use of simulation in educational administration.
2 Columbus, OH: Charles E. Merrill, 1971.

Content Area: Professional competence--education

Skills Tested: Administrative behavior (e.g. leadership, problem solving, human relations skills, communication skills, decision making)

Grade Level(s): Postsecondary

This 300-page book describes the development and use of simulation techniques in the preparation of school administrators and in research on administrative behavior. Nine chapters each focus on a single aspect and/or use of simulation (e.g., the use of the case study method, in-basket techniques, simulating the process for teacher and administrator selection, applications of game theory to administrative behavior, simulation of collective negotiation, uses of computers in simulation, and using simulation to conduct research in educational administration). (SS)

Suggested Users: Researchers
Administrators (professional education)

2 Carey, L.M. An investigation of the validity of using self-evaluation
3 instruments to identify instructional needs. Unpublished paper. Tallahassee, FL: Florida State University, n.d. 11 pp.

Available from EDRS (ED 142 579).

Content Area: Professional competence--education

Skills Tested: Interacting with students
Planning instruction
Evaluating instruction and learning performance
Communicating with peers and parents
Classroom management
Foundations of education

Grade Level(s): Adult

The purpose of this study was to examine the validity of interpreting teachers' perceptions of their performance as an index of their actual performance on specified teaching skills. Two matching instruments were constructed, each composed of 72 items. One instrument measured teachers' perceptions of their competence on behaviorally stated generic teaching skills (the six skill categories are listed as "skills tested" above). The second instrument assessed teachers' actual performance on the same generic skills; the test required written responses. Items in each of the six skill categories were of three types: (1) recall of verbal information; (2) concept identification questions, and (3) problem solving questions. Results obtained with 175 preschool, elementary and secondary teachers showed that teachers' perception scores were significantly higher than their actual performance scores in all six content areas. Furthermore, the rank order of mean scores for each content area shifted, depending on whether perceptions or performance was used as the data source. The author concludes that assessments of in-service training needs based solely on self-reported information is invalid. He argues for the use of actual performance data in the prioritization of in-service training needs. (SS)

Suggested Users: Researchers
Testing specialists
School administrators

1 Cruickshank, D.R. The use of simulation in teacher education: A developing phenomenon. Journal of Teacher Education, 1969, 20(1), 23-26.

Content Area: Professional education

Skills Tested: Teacher competencies

Grade Level(s): Postsecondary

After citing several examples of the pedigogically and economically effective use of simulation in professional education, the author focuses on the role of simulation materials in teacher education. A brief review of the emergence of simulation in teacher training cites the use of in-basket techniques, filmed classrooms, and role-play simulations as key developments. The discussion then turns to the reasons for the heightened interest in simulation in teacher education. One reason is the ability to present real and critical problems in a controlled manner. Another is the advantages simulations offer for student assessment. Yet another is the opportunity to concretely link theory to practice in the classroom. But the most important reason cited is the level of involvement and motivation simulation instills in participants. Despite obvious intellectual and economic benefits, significant questions are as yet unanswered, according to the author. Several important lines of inquiry are identified and researchers are urged to practice them. (RS)

Suggested Users: Testing specialists
Administrators

1 Cyrs, T.E. & Dobbert, D.J. A competency-based curriculum: What is it? Minneapolis, MN: College of Pharmacy, University of Minnesota, 1976. 19 pp.

Available from Curriculum Improvement Office, College of Pharmacy, 115 Appleby Hall, University of Minnesota, Minneapolis, MN 55455.

Content Area: Professional competence--education

Skills Tested: Professional competencies of pharmacists

Grade Level(s): Postsecondary

This publication poses and answers a series of 26 questions about a competency-based higher education curriculum. Such initial questions as "What is a competency?" and "What assessment procedures are appropriate for a competency-based curriculum?" set the stage for subsequent discussions covering the use of performance testing techniques such as simulations, role-playing, gaming, and situational problem solving. Additional topics of discussion include evaluation and validation of competencies, means for establishing the criterion level of performance for a competency, the meaning, objectives, procedures and validation methods of competency analysis (broken down into components), and means of evaluating competency-based programs. (SW)

Suggested Users: Administrators (professional education)
Curriculum specialists

Related Documents: Cyrs & Grussing (1977, 1978)

1 Cyrs, T.E. Jr. & Grussing, P.G. A rationale for competency-based
2 assessment using the assessment center approach. American Journal of Pharmaceutical Education, 1978, 42(1), 66-75.

Content Area: Professional competence--education

Skills Tested: Professional competencies of pharmacists

Grade Level(s): Postsecondary

After reviewing several potential methods of measuring learner competence, the authors come to the conclusion the measurement of professional competence in pharmacy can best be accomplished via assessment centers. Professional competence in pharmacy practice is defined in terms of performance criteria, and an assessment center approach to the measurement of those performance criteria is advocated. Eleven pharmacy performance dimensions were identified via behavioral analyses and are described in detail, including compounding and dispensing prescriptions, as well as communicating and managing effectively. In addition, eleven personal trait dimensions are identified. These include oral and written communication skill, human relations skill, judgment and decision making skill and others. Exercises being developed for the pharmacy assessment center at the University of Minnesota are described. These include a series of seven simulation exercises designed to provide behavioral evidence of professional competence. Behaviorally-anchored rating scales have been developed for each of the performance dimensions and are planned for the personal trait dimensions. Developers cite several advantages of the assessment center approach relative to traditional approaches to measuring student achievement. (RS)

Suggested Users: Administrators (professional education)
Testing specialists

Related Documents: Cyrs & Grussing (1977), Cyrs & Dobbert (1976)

2 Nova University. Educational leadership appraisal (ELA): A progress report. The Gatekeeper's Gazette, 1978, 7(2), 1-16.

Available from Dr. Gerald E. Sroufe, Director, National Ed. D. Program for Educational Leaders, Nova University, 3301 College Avenue, Fort Lauderdale, FL 33314.

Content Area: Professional competence--Education

Skills Tested: Leadership abilities (i.e., management and organization, communication, problem solving, task orientation, and interpersonal qualities)

Grade Level(s): Postsecondary

The report traces the development of Educational Leadership Appraisal (ELA) within Nova University from its beginning to its present status as a comprehensive system for the training and performance based assessment of doctoral students in educational administration. The article also shows how the assessment center model typically used in business and industry to identify administrative talent for promotion and staff development can be adopted or adapted as a performance based assessment system for educational administrators. Primary issues relating to development of the ELA include (1) identifying and defining a list of dimensions important to successful leadership in education; (2) creating exercises based upon the job roles and decision making contexts of school administrators; (3) adapting existing methods for diagnostic uses; and (4) establishing a new type of assessment in educational leadership. The article includes a complete description, with examples, of the development of the leadership dimensions, the situational exercises used to elicit participant performance, and the mechanism used for reporting performance outcomes to participants. Results of a field test and revisions to ELA are also presented, together with information about its current use and special applications outside the program for educational leaders. (SS)

Suggested Users: Administrators (professional education)
Testing specialists

1 Quirk, T. J. Performance tests for beginning teachers: Why all
5 the fuss? Educational Technology, 1973, 13(5), 14-16.

Content Area: Professional competence--education

Skills Tested: Teacher competencies

Grade Level(s): Postsecondary

The author explains how a performance test simulates real life by asking examinees to perform tasks rather than describe what should be done or choose the best answer from a set of alternatives. He describes three kinds of performance tests: recognition tests; simulated condition tests (in-basket exercises, tab tests and microteaching tests), and work sample tests. He concludes with suggestions for constructing and using performance tests. The article includes a diagram showing the relative degree of fidelity and comprehensiveness of different testing approaches (paper-and-pencil and verbal tests, in-basket tests, laboratory microteaching, and on-the-job performance). (JL)

Suggested Users: Testing specialists
School administrators
Teachers

1 Cohen, B.M., Moses, J.L., & Byham, W.C. A literature review. The
3 validity of assessment centers (Monograph II). Pittsburgh, PA: Development Dimensions International, 1977. 33 pp.

Available from Development Dimensions International, 250 Mt. Lebanon Blvd., Pittsburgh, PA 15234. Cost: $6.00.

Content Area: Professional competence--managerial skills

Skills Tested: Managerial behavior

Grade Level(s): Adult

The authors review all validity studies since 1956 that concern the assessment center method of measuring managerial capability. An assessment center program is defined as one in which multiple situational and test-based performance assessment techniques are used to tap performance dimensions related to success. Small groups of trained assessors observe and evaluate assessees individually and in group interactions. The historical evolution of the assessment center approach is reviewed in detail, focusing on validity studies completed during the initial period of development (WWII to mid 1950s), the early industrial period (mid 1950s to late 1960s) and the general application period (late 1960s to present). The most valid initial period applications were those using (1) assessors most familiar with the criterion, (2) simulations or work samples, and (3) performance based on task demands of the job. Early industrial validity research included the first comprehensive longitudinal studies, and these studies revealed the method to be valid, raising interest levels. This stimulated widespread application and broader validation research, reinforcing the conclusion that the method validly predicts future managerial performance. Research trends and methodological problems associated with assessment centers are discussed, and further research needs are identified. (RS)

Suggested Users: Researchers
Testing specialists

Related Documents: MacKinnon (1975)

2 Deluzain, H.E. Evaluation report: School leadership assessment
4 center. Chipley, FL: Panhandle Area Educational Cooperative, 1974.
5 50 pp.

Available from CAPT. Cost: $5.00.

Content Area: Professional competence--managerial skills

Skills Tested:

- Impact (forcefulness)
- Oral communication skill
- Range of interests
- Work standards
- Sensitivity (awareness of social environment)
- Independence (reliance on others)
- Decisiveness
- Self-Objectivity
- Energy
- Written communication skill
- Stress tolerance
- Career ambition
- Flexibility
- Planning and organizing
- Decision making
- Leadership

Grade Level(s): Adults

This report describes the development, implementation, and outcomes of an assessment center for the selection of school administrators. Three objectives guided its development and implementation: (1) development of a list of competencies of school principals and assistant principals agreed upon by several groups (see "skills tested" above, for the final list of administrator competencies); (2) selection of assessment center exercises and training of assessors, and (3) field testing the system by conducting assessments of candidates recommended by school superintendents. The report includes a good deal of information related to the steps taken in meeting these objectives. Data from surveys tapping the opinions and reactions of participants and superintendents regarding various aspects of the assessment center provide an excellent description of its strengths and limitations. Suggestions for resolving problems in using the assessment center method in education are included. (SS)

Suggested Users:

- Researchers
- Testing specialists
- School administrators

Related Documents: Deluzain & Cohen (1976)

1 Dunnette, M.D. The assessment of managerial talent. In F.R. Wickert
3 & D.E. McFarland (Eds.), Measuring executive effectiveness. New York: Appleton-Century-Crofts, 1974. 29 pp.

Content Area: Professional competence--managerial skills

Skills Tested: Managerial behavior

Grade Level(s): Adult

Dunnette provides an overview of multidimensional procedures for assessing managerial potential. He offers a brief definition of the managerial job, and explores implications of that definition for the measurement and prediction of effectiveness--including the need to measure individual and organizational attributes using manager-organization introduction simulations. Assessment techniques are described for the measurement of 34 trait, motivational, and behavioral dimensions of managerial success. The techniques include interview, in basket, simulated business situations, paper-and-pencil tests, projective tests and questionnaires. According to the author, these techniques are used to advantage in both manager identification and manager development. Research on managerial multiple assessment programs is reviewed, factor analyses briefly summarized, and reliability studies concisely reviewed. Also, predictive validity research is reviewed in a comprehensive manner. Based on these reviews, the author concludes that multiple assessment approaches planned and conducted in a careful manner provide a more complete profile of management proficiency than do restricted and narrow paper-and-pencil approaches. According to the author, the principal advantage of multidimensional assessment based in simulated business situations is its focus on the manager/organization introduction. (RS)

Suggested Users: Researchers
Testing specialists

1 Finkle, R. B. Managerial assessment centers. In M. D. Dunnette (Ed.), Handbook of industrial and organizational psychology. Chicago: Rand McNally, 1976.

Content Area: Professional competence--managerial skills

Skills Tested: Managerial behavior

Grade Level(s): Adults

This chapter reviews variations and similarities in the following assessment center characteristics: purposes and uses, instruments and techniques, assessor composition and training, procedures for integrating observations, assessment reports, feedback to assessees, and involvement of professional psychologists. The author includes an annotated bibliography of nineteen research studies on the assessment center method. The concluding section examines the effects of and reactions to assessment centers in organizations using the method.

Suggested Users: Industrial psychologists
Testing specialists

13 Greenwood, J.M. & McNamara, W.J. Interrater reliability in situational tests. Journal of Applied Psychology, 1967, 51(2), 101-106.

Content Area: Professional competence--managerial skills

Skills Tested: Managerial behavior in group situational exercises (e.g., aggressiveness, oral communication skill)

Grade Level(s): Adults

This study was conducted to determine the degree of interrater reliability in situational tests and the relative reliability of professional and non-professional evaluators in this assessment context. Participants in an electronics company personnel assessment program were observed by professionals (psychologists and sociologists) and non-professionals (high-level experienced managers with minimum training in assessment) as they participated in each of three group situational exercises. The exercises were designed to simulate both cooperative and competitive business situations and to provide observers with behavioral evidence on which to rate specific dimensions of managerial proficiency. Interrater agreement across multiple ratings of the same behavior sample was indexed in the form of correlations among ratings and rankings of performance and mean ratings. Interrater reliabilities approximated .75 consistently across samples of subjects, raters and exercises, and mean ratings were similarly consistent. Reliability estimates were seen as consistent with previous research. Further, the researchers found professional and non-professional interrater reliabilities to be equivalent, with neither group consistently higher or lower than the other. The authors conclude that situational tests can be used to generate stable estimates of assessors' managerial proficiency using various types of raters. (RS)

Suggested Users: Researchers
Testing specialists

1 Howard, A. An assessment of assessment centers. Academy of
3 Management Journal, 1974, 17(1), 115-134.

Content Area: Professional competence--managerial skills

Skills Tested: Managerial behavior (e.g., leadership, organizing and planning, decision making, oral and written communication skills, human relations competency)

Grade Level(s) Adult

After citing several criticisms of the assessment center approach to measuring managerial proficiency, the author describes that approach in detail and reviews current research on its reliability and validity. The description covers objectives of the approach, examples of behavioral dimensions evaluated, and examples of tests and exercises typically employed. These tests and exercises include in-basket exercises (most frequently used), leaderless group discussions, management games, individual presentations, objective and projective tests and in-depth interviews. Center operation and data utilization procedures are reviewed. A review of ten studies of the consistency of performance ratings across multiple raters (interrater reliability) leads the author to conclude that several assessment components are sufficiently reliable to support their further use. The validity of applied performance assessment as used in assessment centers is explored from various perspectives. Based on review of ten studies the author concludes that assessment results can predict future job status in terms of management level, salary increment, and supervisor ratings. Validity of the assessment center approach in selecting managers is compared with the validity of other approaches (e.g., consultant inventories, performance appraisals and tests). Benefits and drawbacks are cited, and additional research needs outlined. (RS)

Suggested Users: Researchers
Testing specialists
Industrial psychologists

Related Documents: Cohen, et al. (1977)

1 Jacobs, T.O. The evaluation of leadership skills (Professional
5 paper 11-73). Alexandria, VA: Human Resources Research Organization, 1973. 15pp.

Available from EDRS (ED 087 871)

Content Area: Professional competence--managerial skills

Skills Tested: Leadership skills

Grade Level(s): Adult

The development of leadership evaluation procedures is said to have been impeded by a lack of agreement as to (1) the definition of leadership, (2) the effect of leader-organization interactions, (3) appropriate leadership training experiences, and (4) appropriate means of measuring leadership ability. Specific problem areas cited include difficulty in identifying the "true expert" to analyze the components of leadership, lack of clarity concerning the ultimate criterion measures against which to validate leadership conceptualizations, and the fact that leadership skills are essentially disjunctive. Each problem is analyzed and strategies for resolutions are cited. The assessment center approach to measuring managerial proficiency is discussed as a possible prototype of future leadership evaluation approaches. Areas in need of further research and development are cited, including (1) the substantive nature of leadership, (2) continued search for intermediate criteria, and (3) continued attempts to learn how to behaviorally modify an individual to be a more effective leader. (RS)

Suggested Users: Industrial psychologists
Testing specialists

2 Jeswald, T.A. A new approach to identifying administrative talent. National Association of Secondary School Principals Bulletin, September 1977, 61(410), 79-83.

Content Area: Professional competence--managerial skills

Skills Tested: Administrative behavior (e.g., problem analysis, organizational ability, leadership, communication skill)

Grade Level(s): Adult

This article describes a pilot demonstration of techniques used in the National Association of Secondary School Principals (NASSP) Assessment Center for predicting and assessing school administrators' performance. The technique is particularly applicable to those jobs for which the typical applicant's current job experience is not relevant. A job study of school administrators' tasks and responsibilities resulted in the selection of twelve behavioral dimensions to be assessed. Four simulations and a semi-structured personal interview were used to assess candidates' strengths and weaknesses in problem analysis, judgment, organizational ability, decisiveness, leadership, sensitivity, range of interests, personal motivation, educational values, stress tolerance, oral, and written communication skills. Sample guidelines are offered for using the resulting assessment reports, and for introducing and implementing the technique elsewhere. (SW)

Suggested Users: Researchers
Testing specialists
School administrators

1 MacKinnon, D.W. An overview of assessment centers. Technical report
3 No. 1. Greensboro, NC: Center for Creative Leadership, 1975. 46 PP.
5

Available from EDRS (ED 151 682).

Content Area: Professional competence--managerial skills

Skills Tested: Managerial behavior

Grade Level(s): Adult

MacKinnon offers a comprehensive portrait of the growth and current status of managerial proficiency assessment centers. He presents the nature of and reasons for the growth in popularity of assessment centers through the 1970s. Face validity of the centers and equal employment thrusts are seen as key factors. Various features of assessment center are described to illustrate the broad variation that has occurred in operationalizing the concept. Methods and techniques of assessment are described, as are dimensions of behavior, center staffing and management procedures, assessor training, candidate selection procedures and feedback mechanisms. Research on the reliability of assessment and factor analytic studies are reviewed. In addition, validity studies are reviewed in some detail. Both benefits and potential defects of assessment centers are discussed. Methodological issues are explored, and new uses of assessment centers in educational settings are reviewed. The author concludes the paper with a note on the growing sensitivity of assessment center users to the need to adhere to strict ethnical standards. (RS)

Suggested Users: Testing specialists

Related Documents: Cohen, et al. (1977)

1 MacKinnon, D.W. How assessment centers got started in the United
2 States (Monograph I). Pittsburgh, PA: Development Dimensions International, 1974. 26 pp.

Available from Development Dimensions International, 250 Mt. Lebanon Bl., Pittsburgh, PA 15234. Cost: $6.00.

Content Area: Professional competence--managerial skills

Skills Tested:
- Motivation
- Practical intelligence
- Emotional stability
- Social relations
- Leadership
- Physical ability
- Observation and reporting
- Propaganda skills
- Maintaining cover

Grade Level(s):
- Postsecondary
- Adult

The article chronicles the history of the Office of Strategic Services (OSS) Assessment Program, and offers the OSS staff's recommendations for planning and operating future assessment centers in business, industry, government and education. Though emphasis is on the history of the founding of assessment centers, details of the OSS assessment exercises and appraisal system provide an entertaining and informative background for this basic overview. The author presents the rationale for and a description of the components of each of the rated dimensions of the assessment program exercises, including the preliminary life-history psychiatric interview conducted for each potential candidate, and the final report on which candidates' ratings on each dimension are compiled and reviewed. Data on the effectiveness of the OSS assessment program reveal positive but low correlations between the assessment staff's ratings and later performance on the job. A list of recommendations to improve assessment centers concludes the report. (LP)

Suggested Users:
- Researchers
- Testing specialists
- Industrial psychologists

Related Documents: MacKinnon (1975)

5 Masterson, J. & Williams, L. A catalogue of performance objectives and criterion-referenced measures for professional competencies needed by local vocational administrators in Kentucky. Richmond, KY: Department of Industrial Education and Technology, Eastern Kentucky University, 1977. 160 pp.

Available from EDRS (ED 149 029); microfiche only.

Content Area: Professional competence--managerial skills

Skills Tested: Program administrator competencies (e.g., program planning, staff recruitment, needs assessment)

Grade Level(s): Adult

Performance objectives and criterion-referenced measures are outlined for 75 tasks identified as necessary to the successful performance of local vocational administrators. Tasks are organized under 13 duty categories: program planning and implementation; staff recruitment; personnel development and management; scheduling staff; advisory committees; data collection and analysis; work place safety; occupational program follow-up; supervisory functions; complying with legislation; management of physical facilities and equipment, and public relations. An introductory section summarizes the acitivities of the research project in which the tasks were identified and the catalog compiled. Appendices contain an annotated list of references from the state-of-the-art review conducted at the beginning of the project, and the task inventory used as a questionnaire for compiling the original competency list. (ERIC)

Suggested Users: School administrators

1 Rice, B. Measuring executive muscle. Psychology Today,
2 December 1978, 95-110.

Content Area: Professional competence--managerial skills

Skills Tested: Managerial behavior (e.g., leadership, initiative, decisiveness, problem analysis, communication)

Grade Level(s): Adult

This paper presents a case study illustration of the assessment center approach to measuring managerial proficiency. Ten middle-level managers from a major corporation are followed through three days of job-related simulations, during which they are observed and evaluated by trained and experienced assessors from their own managerial ranks. Three simulation exercises are described. The first is an in-basket exercise in which the candidate must deal quickly and competently with a series of management decisions in an unfamiliar context. Raters debrief the candidates on reasons for each decision made or action taken and explore the candidates' management backgrounds. The second exercise is a management game designed to assess performance in a group situation. The third exercise is a simulated consultation with a small but successful firm considering expansion. As a result of their performance in these exercises, each candidate is rated on each of 26 prespecified behavioral dimensions. Ratings base on behavioral criteria and corporate-wide standards. Candidate reaction to the assessment center experience is explored, and examples of corporate use of results presented. In addition, the author discusses the validity of the approach. Criticisms of assessment centers are also discussed in some detail, with emphasis on the inadequacy of validity research to date. (RS)

Suggested Users: School administrators

1 Uretsky, M. The management game: An experiment in reality.
2 Simulation & Games, 1973, 4(2), 221-240.

Content Area: Professional competence--managerial skills

Skills Tested: Business management abilities

Grade Level(s): Postsecondary

The author provides a general description of The New York University Management Game--a large and complex business community and computer-based simulation of a functioning competitive business environment. The game is designed to provide students with a compressed yet realistic experience in the management of a medium sized corporation. Students are exposed to problems and opportunities in operations, marketing, and financial transactions. Participants form teams to serve as senior management, while the computer fulfills the roles of lower-middle management and all other employees. The computer performs day-to-day operations and follows directions of senior management. Prominent business leaders from the surrounding community are recruited to play their real-life roles in the game. Bankers, underwriters, insurance specialists, lawyers, federal officials (IRS and FTC), as well as members of various accounting and labor relations classes at NYU, consult one another and make senior management decisions. Such indices as profit and market share reflect the adequacy of individual and group performance. Developers claim that the simulation, which is a descendant of the Carnegie-Tech Management Game, is reaching its goals of providing students with (1) an interrative experience tying courses together with one another and with the real world, (2) experience in problem solving, and (3) an opportunity for direct contact with members of the business community. (RS)

Suggested Users: Administrators (Business administration schools)
Professors (Business administration)

1 Andrew, B.J. An approach to the construction of simulated exercises
5 in clinical problem solving. Journal of Medical Education, 1972, 47, 952-958.

Content Area: Professional competence--medical fields

Skills Tested: Patient management skills
Clinical problem solving

Grade Level(s): Postsecondary

This paper proposes a clinical problem solving model, describes the problem solving characteristics necessary to construct simulated patient management exercises, and outlines a technique for developing such exercises. The problem solving process includes six interdependent, sequential components: problem sensing; hypothesizing; searching and defining; identifying the problem; resolving the problem, and verifying the solution. In clinical management, this sequence becomes patient presentation, data gathering, diagnosis, identification, therapy, and followup. The cognitive components of problem solving are listed and translated into the structure of a clinical management exercise. This is followed by a step-by-step description of the process of actually constructing simulated patient management exercises. Steps include case selection and description, development of possible hypotheses, description of appropriate search procedures, data collection, planning, problem branching, and outlining various paths to solutions. (RS)

Suggested Users: Researchers
Testing specialists

Related Documents: McGuire & Babbott (1967), Willamson (1965), Levine & McGuire (1970)

Andrew, B.J., Erviti, V.F., & Dowaliby, F.J. National program for the evaluation of primary care physicians' assistants. Final report. Philadelphia, PA: National Board of Medical Examiners, 1976. 177 pp.

Available from EDRS (ED 134 678).

Content Area: Professional competence--medical fields

Skills Tested: Patient diagnosis and management
Patient counseling

Grade Level(s): Adult

This report describes the development of the National Certifying Examination for Primary Care Physicians' Assistants. Development of the examination began with task analyses of health care functions in three major categories: data gathering; analysis and interpretation, and medical and health care strategies. The examination consisted of multiple choice items as well as simulated patient management problems. Several validation and reliability studies are reported which support the continued use of the examination. An Appendix includes a sample written patient management simulation. (SS)

Suggested Users: Researchers
Testing specialists

1 Cyrs, T. E. & Grussing, P. G. Rationale for development of multi-dimensional assessment procedures of pharmacy student competence through the assessment center approach. In T. E. Cyrs (Ed.), Handbook for the design of instruction in pharmacy education. Minneapolis: College of Pharmacy, University of Minnesota, 1977. 16 pp.

Available from Dr. Thomas Cyrs, Center for Educational Development and Evaluation, New Mexico State University, 3-IDC, Las Cruces, NM 88003.

Content Area: Professional competence--medical fields

Skills Tested: Professional competencies of pharmacists

Grade Level(s): Postsecondary

The authors discuss the use of assessment center methods as a supplement to traditional student evaluation procedures in pharmacy education. Noting the inadequacy of paper and pencil tests as measures of problem solving and professional judgment, the chapter proposes situational assessment procedures requiring students to demonstrate higher level competences in real world settings. In addition to simulation techniques, the authors review the contribution of other measures in a competence-based curriculum (i.e., objective and essay examinations, attitudinal measures, project assignments, oral examinations, and observational reports). The relevance of this publication is not limited to pharmacy education; the techniques proposed are applicable to a variety of competence-based curricula. (SS)

Suggested Users: Administrators (professional education)
Testing specialists

Related Documents: Cyrs and Grussing (1978), Cyrs & Dobbert (1976)

3 Educational Testing Service. Validation of the proficiency examina-
4 tion for diagnostic radiologic technology. Final report. Princeton,
5 NJ: Author, 1977. 114 pp.

Available from EDRS (ED 148-901); microfiche only.

Content Area: Professional competence--medical fields

Skills Tested: Radiation protection
Patient care
Technique and quality control
Positioning

Grade Level(s): Adult

The validity of the Proficiency Examination for Diagnostic Radiologic Technology was investigated, using 140 radiologic technologists who took both the written Proficiency Examination and a performance test. As an additional criterion measure of job proficiency, supervisors' assessments were obtained for 128 of the technologists. The resulting data indicated that the total score on the Proficiency Examination was a valid indicator of overall job proficiency for radiologic technologists, and that separate subscores do not provide additional valid information about proficiency in the specific skill areas of radiation protection, patient care, technique and quality control, and positioning. Although the performance test was developed as a criterion measure for validating the written examination, this report provides useful information concerning steps in its development and administration. (ERIC/SS)

Suggested Users: Researchers
Testing specialists

1 Kelley, J.M. Developing performance based assessment techniques using
5 the performance description approach. Paper presented at the Annual Conference on Alcohol and Drug Treatment Evaluation, Winnipeg, Manitoba, 1977. 48 pp.

Available from EDRS (ED 153 093).

Content Area: Professional competence--medical fields

Skills Tested: Counseling skills

Grade Level(s) Postsecondary
Adult

This paper describes in some detail Siegfreid's Process Mapping Model for describing human performance. The model's application to task analysis and the advantages of using it when constructing assessment strategies and instruments are discussed. Examples of the model's use in building portfolios, behavioral rating scales, and skill demonstration packages are set forth. Such skill demonstration packages can, when properly constructed and organized, identify those individuals whom one can conclude are able to perform various activities related to a job. They will not, however, predict the extent to which these individuals will perform adequately on the job. The authors suspect that skill demonstration packages may be most useful in diagnosing areas in which a given counselor needs to improve skills, as opposed to being used in predicting a counselor's level of effectiveness. (Author)

Suggested Users: Testing specialists

2 Lamont, C.T. & Hennen, B. The use of simulated patients in a
3 certification examination in family medicine. Journal of Medical Education, 1972, 47, 789-795.

Content Area: Professional competence--medical fields

Skills Tested: Factual recall
Observation and interpretation
Problem solving
Attitudinal skills

Grade Level(s): Postsecondary

This paper describes a simulated office oral examination (one component of the Certification Examination of the College of Family Physicians of Canada). The candidate for certification is given the task of interviewing three simulated patients, each of whom has been "programmed" to portray an individual with a problem that is commonly encountered in family practice. The authors describe procedures in administering the examination, scoring criteria used by examiners, and the correlation between scores on the simulated office oral and other components of the examination. Advantages and disadvantages of simulation are discussed, as is the technique's ability to satisfy a variety of validity criteria. (SS)

Suggested Users: Researchers
Testing specialists
Administrators (professional education)

Levine, H.G. & McGuire, C.H. The use of role-playing to evaluate effective skills in medicine. Journal of Medical Education, 1970, 45, 700-705.

Content Area: Professional competence--medical fields

Skills Tested: Interpersonal relations and communication

Grade Level(s): Postsecondary
Adult

Given the importance of patient compliance and cooperation, the physician's ability to communicate with patients and colleagues is critical to the successful practice of medicine. With this in mind, an oral role-playing test of interpersonal skills was developed and included in the Orthopedic Certifying Examination. This paper reviews the research and development that preceded implementation of the test. The test is described as a series of short simulations in which trained examiners play the roles of patient, colleague and/or allied health professionals in a series of standardized encounters. Examinees are rated on recall, problem solving, interpretation and attitudes. Data are presented on reliability, focusing on rater and sampling error variance, and suggesting that the oral simulations can yield reliable scores. Validity of the oral simulations is examined from content, construct, and concurrent perspectives. Feedback from qualified judges suggests that attitudes and skills rated meet acceptable standards of content validity. Though data are compatible with assumptions of reasonable construct and concurrent validity, neither type of validity is conclusively established. Suggestions are made for improving the test. (RS)

Suggested Users: Researchers
Testing specialists
Administrators (medical education)

Related Documents: McGuire & Babbott (1967), Andrew (1972), Williamson (1965)

1 McGuire, C.H. & Babbott, D. Simulation technique in the measurement
2 of problem solving skills. Journal of Educational Measurement, 1967, 4(1), 1-10.

Content Area: Professional competence--medical fields

Skills Tested: Patient management decisions
Clinical skills

Grade Level(s): Postsecondary

The authors describe techniques for constructing and scoring written patient simulation problems in evaluating clinical competence. The reliability and validity of such problems are also briefly discussed. In addition, the authors offer guidelines for developing simulation exercises, emphasizing the need to employ realistic physician-patient encounters requiring a series of sequential interdependent diagnostic decisions allowing for a variety of medical approaches. An example of such a clinical problem is outlined. Suggestions are made for constructing exercises that focus on the various stages of diagnostic data collection while avoiding the inclusion of cues. Procedures for scoring simulation exercises are then reviewed. The issue of validity is addressed from multiple perspectives. Physician opinion and correlational data provide a basis for the argument that simulation exercises are qualitatively different from objective tests. Because behavior is sampled in broader fragments, the probability of sampling error is reduced relative to objective tests. Preliminary evidence of concurrent and construct validity is presented. Preliminary estimates of internal consistency are clustered in the .80 to .90 range. These data lead the authors to conclude that simulations are valuable in assessing problem solving skills in clinical medicine. (RS)

Suggested Users: Testing specialists

Related Documents: Williamson (1965), Andrew (1972), Levine & McGuire (1970)

4 National Highway Traffic Safety Administration. Training program for emergency medical techincian: Dispatcher. Instructor lesson plans. Washington, D.C.: Author, 1976. 123 pp.

Available from Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Stock No. 050-003-00237-3, $2.15. Also available from EDRS (ED 150 303).

Content Area: Professional competence--medical fields

Skills Tested: EMT dispatcher competencies (e.g., operating telecommunications equipment, eliciting information from callers, knowledge of local medical facilities)

Grade Level(s): Adult

Intended to assist instructors who wish to conduct a training course for emergency medical technicians (EMTs) serving as dispatchers, this document contains detailed lesson plans organized to structure course presentations. Each lesson plan includes the following elements: unit objectives; suggestions for adapting the lessons to local policies and conditions; information and instructions related to course content; and review exercises. Test materials that have been keyed directly to the course objectives are also included. The lesson plans are designed to accompany a two-part training course developed to prepare individual EMTs to operate a telecommunications base station. Part 1 of the course covers the skills and knowledge needed to perform the basic duties required for allocating appropriate emergency medical resources to the scene of each emergency. Part 2 covers specialized dispatcher functions such as police or fire dispatching. (Two other documents accompany this set of instructor's lesson plans: a study guide and a course guide for the coordinator or administrator). (ERIC/SS)

Suggested Users: Teachers

1 VanWart, A.D. A problem solving oral examination for family medicine.
2 Journal of Medical Education, 1974, 49(7), 673-680.

Content Area: Professional competence--medical fields

Skills Tested: Patient management decisions
Clinical skills
Ability to relate to patients

Grade Level(s): Postsecondary

The author describes an oral examination developed by the College of Family Physicians of Canada for observing and measuring problem solving in a simulated practice setting. The article stresses the advantages of the oral exam over a written or computer-terminal test, especially on validity and reliability issues. Called the Formal Oral, the structured problem solving oral examination simulates typical daily tasks for the family physician, and requires that the candidate find his or her own way through the patient's problems based on sequenced data provided by an examiner. A series of preselected problems are scored by two independent examiners and a validator. Typical problem areas and scoring methods are described. Data from a validity study correlating composite scores on the 1972 Formal Oral with the composite certification grades of the same year show a moderate correlation for the 300 candidates tested; reliability data are not included. Ethical and financial constraints affecting administration of the Formal Oral are also discussed. The technique of simulating real-life problem situations can be generalized to contexts outside medical certification. (LP)

Suggested Users: Administrators (professional education)
Testing specialists

2 Williamson, J.W. Assessing clinical judgment. Journal of Medical
3 Education, 1965, 40(2), 180-187.

Content Area: Professional competence--medical fields

Skills Tested: Patient management skills
Clinical problem solving

Grade Level(s): Postsecondary

Citing inadequacies in available strategies for assessing the clinical judgment of physicians, the author employs the simulated patient problem technique ("Patient Management Problem") to explore the clinical capabilities of practicing physicians. Patient management problems are described and the simulation procedure is illustrated in detail with a sample exercise. Procedures for rating physician performance and transforming that performance into indices of efficiency, proficiency and overall competence are described, along with results of a study in which a number of patient simulations were administered to 232 volunteer physicians. Patterns of reponse are explored and generalizations drawn regarding the diagnostic and therapeutic decisions made by the participants. Such factors as physician's background, training and artification status are considered in the analysis. Strategies are suggested for improving simulated patient problems to better reflect physicians' diagnostic strengths and weaknesses. (RS)

Suggested Users: Researchers
Testing specialists

Related Documents: McGuire & Babbott (1967), Andrew (1972), Levine & McGuire (1970)

1 Fiks, A.I., et al. Public assistance worker job trial. Final
3 technical report. Philadelphia, PA: Jewish Employment and
4 Vocational Service, 1976. 202 pp.
5

Available from EDRS (ED 133 463), microfiche only

Content Area: Professional competence--skilled trades

Skills Tested: Job elements for income maintenance worker trainee (organizing work load; interpreting and applying DPW policy; interviewing clients and others; writing reports, correspondence and filling out forms, calculating budgets)

Grade Level(s): Adult

The project reported here was conducted to develop and evaluate a work sample test battery for selecting applicants for public assistance worker positions. The tests present examinees with tasks or problems simulating tasks encountered on the job; the battery is based on five major task categories (listed as "skills tested" above) which were identified through the project's job analysis phase. The second phase, conceptualization of the job trial design and construction of the test battery, included development of prototypes, pilot testing, and revision. Several sample instruments are presented. The results of content validity, predictive validity, and reliability studies of the examination are described in the report. (SS)

Suggested Users: Researchers
Testing specialists

1 Foley, J.P., Jr. Evaluating maintenance performance: An analysis.
3 Wright-Patterson Air Force Base, OH: Advanced Systems Division, Air Force Human Resources Laboratory, 1974. 38 pp.

Available from EDRS (ED 109 195).

Content Area: Professional competence--skilled trades

Skills Tested: Electronic maintenance tasks

Grade Level(s): Adult

The literature on vocational education indicates that considerable emphasis has been placed on the development of objectives and meterials for highly job-relevant courses. However, very little attention has been given to the validity of measurement procedures for ascertaining that these job objectives have been achieved. Paper and pencil testing procedures are used almost exclusively for determining which personnel are selected for training, for determining student progress while in training and for determining the promotion eligibility of personnel assigned to field maintenance units. This analysis of reported research indicates that these measurement procedures do not insure that these personnel can perform the electronic maintenance tasks generated by the electronic hardware they are assigned to maintain. Most of the paper-and-pencil tests used in training and promotion concern theory and job knowledge. Studies are cited which indicate that extremely low correlations were obtained by comparing job task performance tests to paper-and-pencil theory tests and to job knowledge tests. Criterion-referenced Job Task Performance Tests (JTPT) are required to determine if training objectives are achieved. However, a serious gap remains in this technology, since adequate guidance is not available for the development of JTPT. When administered, JTPT have been expensive in terms of equipment, time and administrative personnel. JTPT should be utilized in spite of their high cost if they are the only empirically valid tests available. (Author)

Suggested Users: Researchers
Testing specialists

4 Glaser, R., Damrin, D.E., & Gardner, F.M. The tab item: A technique
5 for the measurement of proficiency in diagnostic problem solving tasks. Educational and Psychological Measurement, 1954, 14(2).

Content Area: Professional competence--skilled trades

Skills Tested: Trouble-shooting electronic equipment

Grade Level(s): Adult

The Tab Item test, developed for measuring the proficiency of Air Force maintenance personnel, is described in this article. The test simulates electronics trouble-shooting problems by allowing the examinee to choose one or more diagnostic checks to be performed on malfunctioning equipment. After the examiner makes a choice, he removes the paper tab which has concealed the information that would be revealed by an actual "hands-on" diagnosis (e.g., a picture of an oscilloscope trace, or a verbal description of the results of the selected check procedure). Based on the information thus obtained, the examinee can select other checks or can choose to identify the malfunctioning component. The exam continues until the correct component is identified. The authors outline steps in constructing tab item tests and discuss alternative scoring procedures and standard setting considerations. They point out that this procedure is applicable to the measurement of diagnostic or problem solving ability in a variety of disciplines. (SS)

Suggested Users: Testing specialists

3 Schmidt, F.L. et al. Job sample vs. paper-and-pencil trades and technical tests: Adverse impact and examinee attitudes. Personnel Psychology, 1977, 30(2), 187-197.

Content Area: Professional competence--skilled trades

Skills Tested: Machine shop skills

Grade Level(s): Adult

The authors report results of a study in which the adverse impact of a content-valid job sample test of metal trades skills was compared to that of a well-constructed content-valid written achievement test for the same technical area. The adverse impact of the job sample test, defined as the difference between minority and majority performance, was found to be less. Moreover, both minority and majority examinees considered the job sample test more fair. Job sample test development procedures are outlined, focusing on test construction, administration, scoring and psychometric adequacy. The paper-and-pencil test is also described. Adverse impact, defined as the difference between majority and minority performance, was considerably less for the job sample test than the paper-and-pencil test. In addition, both minority and majority examinees saw the job sample test as significantly fairer, clearer, and more appropriate in level of difficulty. There were no significant differences between majority and minority attitudes toward either test. In eight of these results, the researchers suggest that industrial psychologists explore more fully the potential of performance testing. The test development techniques used are said to have decreased the cost and increased the efficiency and the feasibility of performance testing. (Author/RS)

Suggested Users: Researchers
Testing specialists

ASSESSMENT METHODOLOGY

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1 Asher, J.J. & Sciarrino, J.A. Realistic work sample tests: A review.
3 Personnel Psychology, 1974, 27(4), 519-533.

Content Area: Assessment methodology

Skills Tested: Work samples (psychomotor and verbal)

Grade Level(s): Adult

The authors present results of a literature review on the predictive validity of work sample-based assessments. Predictive validities are compared across two types of work sample tests: (1) Motor tests which involve the physical manipulation of things, and (2) verbal tests which rely primarily on language-oriented or people-oriented problems. Numerous specific examples of each type of test are listed. Biographical information is also included in the predictive model. The criterion variables cited in the studies reviewed are classified as job performance measures (usually based on supervisor ratings) or success in training (as reflected in completion of training or grade received). The synthesis of research suggests that biographical information is the best predictor of job success in all cases. In addition, when job proficiency is the criterion, motor work samples provided the next best predictor, with the verbal work sample adding to predictive accuracy. When the criterion is success in training, the verbal work sample is the most accurate predictor. Various hypotheses regarding the relationship revealed in these studies are discussed. (RS)

Suggested Users: Industrial psychologists
Testing specialists

6 Becker, T.M. A directory of information on tests (TM Report 62). Princeton, NJ: ERIC Clearinghouse on Tests, Measurement, and Evaluation, Educational Testing Service, 1977. 42 pp.

Available from ERIC Clearinghouse on Tests, Measurement, and Evaluation, Educational Testing Service, Princeton, NJ 08541. Cost: $3.00. Also available from EDRS (ED 152 802).

Content Area: Assessment methodology

Skills Tested: All skill areas (cognitive, affective and psychomotor)

Grade Level(s): Elementary
Secondary
Postsecondary

The purpose of this document is to provide a comprehensive overview of sources of information on educational and psychological tests. Three types of sources are covered: (1) print materials, i.e., books and journal articles that deal with information on a number of tests--approximately 100 published sources are identified and annotated; (2) information retrieval systems specifically designed to respond to search questions about educational and psychological tests--five are described, and (3) supplementary reference sources, such as literature indeces, specific journals, and computerized information retrieval systems. The author also discusses some strategies for conducting a search for tests and test-related information. This publication is an indispensible tool for anyone intent on finding "what's out there" in testing and measurement. Several of the print materials cited include information on performance tests. (SS)

Suggested Users: Researchers
Testing specialists
Reference librarians

1 College Outcome Measures Project, American College Testing
3 Program. COMP Annual Report 1978. Iowa City, IA: Author, 1978. 32 pp.

Available from Dr. Aubrey Forrest, Director, College Outcome Measures Project, American College Testing Program, P.O. Box 168, Iowa City, IA 52240. No charge.

Content Area: Assessment methodology

Skills Tested: Communicating
Solving problems
Clarifying values
Functioning within social institutions
Using science and technology
Using the arts

This project annual report presents the results of six research studies focusing on the measurement instruments developed as part of ACT's College Outcome Measures Project (COMP/ACT). After providing an overview of the purpose, assumptions, and measurement focus of the project, the authors review in detail from studies of the COMP/ACT Measurement Battery--a series of applied performance tests covering various skill and content domains. The first study describes the initial field trial of the battery, the second is a test/retest reliability study, the third relates scores on the Measurement Battery to performance on the COMP/ACT Objective test, the fourth covers a VOC-tech School interpretation of the battery, and the fifth covers the use of COMP/ACT with adults. The final two summaries deal with other aspects of the project user whole: strategies for assessing speaking and writing skills and an advisory panel evaluation of the project. (RS)

Suggested Users: Testing specialists
Curriculum specialists
Administrators
Teachers

1 Fink, C.D., et al. A state-of-the-art review of techniques and procedures for the measurement of complex human performance. Alexandria, VA: Human Resources Research Organization, 1974. 208 pp.

Available from EDRS (ED 150 167).

Content Area: Assessment methodology

Skills Tested: Job-related performance

Grade Level(s): Secondary
Postsecondary
Adult

This report reviews a total of 33 non-paper-and-pencil techniques designed to get at the "hard to measure" aspects of human performance. Most of the techniques included have been developed for the measurement of job-related skills, but are highly generalizable to a variety of contexts. Four measurement categories used to structure the report are: self-provided information (e.g., interviews); appraisal by others (e.g., rating scales); behavioral measurement (e.g., situational tests), and behavioral audit. The largest category, behavioral measurement, includes discussions of listening tests, assessment center methods, systematic observation systems, simulation techniques and work sample tests. For each assessment technique, the authors provide a general description of the method and judgments about its reliability, validity, current state of refinement, feasibility of use and appropriate types of behaviors assessed by the method. An extensive bibliography cites the major literature related to each technique. (SS)

Suggested Users: Researchers
Testing specialists

1 Hecht, K.A. & Fortune, J.C. Professional licensing and certification: Part I, Current status and methodological problems of validation; Part II, Analysis of testing procedures and their implementation for practice. Paper presented at the Annual Meeting of the National Council on Measurement in Education, 1976. 35 pp.

Available from EDRS (ED 141 380)

Content Area: Assessment methodology

Skills Tested: Occupational competencies

Grade Level(s): Postsecondary
Adult

The author documents the need for better validation of professional licensing and certification examinations in Part I. Predictive criterion-related validation studies are difficult to develop, time consuming, impractical and expensive. Since training and knowledge variables are not necessarily sufficient to predict job proficiency, it appears logical to look to performance testing for solutions to the problems of validating and revising licensure exams more effectively. Four areas in which there are differences in practice across differing licensure examinations are discussed in Part II: (1) the type of test; (2) the type of controls involved in the testing process; (3) the kind of evidence utilized in the entry decision, and (4) the range of authority and the degree to which the examination provides a right to practice. Differences in practices across these four areas appear to be directed toward differential control of three primary sources of malpractice--absence of entry level professional skills, absence of adequate behavior patterns to cope with the pressures of professional practice and absence of adequate updating of professional practice. (ERIC)

Suggested Users: Researchers
Testing specialists

1 Lineham, M.M. Content validity in behavioral assessment. Paper presented at the Annual Meeting of the American Psychological Association, 1976. 13 pp.

Available from EDRS (ED 152 850).

Content Area: Assessment methodology

Grade Level(s): Elementary
Secondary
Postsecondary
Adult

Both criterion-referenced testing and behavioral assessment share the basic assumption that test behavior is a sample rather than a sign. Although content validity has been traditionally recognized as essential to criterion-referenced testing, it has not been as generally recognized as relevant to behavioral assessment. The relationship between the two types of assessment clarifies the importance of content validity for behavioral assessment. Questions of content validity can be usefully conceptualized from the point of view of generalizability theory. The relevant question then becomes: Are the test items a representative sample of the universe to which results are going to be generalized? Representative sampling may be required for facets of time, behavioral dimensions or tasks, observers, and test stimuli. The author offers several suggestions for establishing the content validity of performance tests consisting of behavioral samples. (Author/SS)

Suggested Users: Researchers
Testing specialists

1 Muchinsky, P.M. Utility of work samples. Personnel Journal, 1975,
2 54(4), 218-220.
5

Content Area: Assessment methodology

Skills Tested: Job-related skills

Grade Level(s): Adult

Paper-and-pencil tests used in personnel selection are most appropriately validated, according to the author, in terms of their relationship to the actual requirements of the job. EEOC guidelines require that tests used to measure elegibility for hiring be content valid. The author cites work sample-based tests as having a high level of content validity and therefore a high level of utility in personnel selection. Strategies for work sample development are outlined, beginning with a job analysis to identify the knowledge skills and abilities that are most crucial to job success. Jobs are cited in which work samples are most appropriate, such as building, mechanical, and manual trades. However, people-oriented jobs are not as easily simulated via work samples, according to the author. The paper concludes with an illustration of the development and use of a work sample-based assessment in a civil service context. The detailed case study covers all key aspects of the assessment development sequence. (RS)

Suggested Users: Testing specialists
Industrial psychologists

1 Osborn, W.C. Essential dimensions of performance tests (Professional
5 Paper 1-77). Alexandria, VA: Human Resources Research Organization, 1977. 9 pp.

Available from EDRS (ED 137 382).

Content Area: Assessment methodology

Grade Level(s): Secondary
Postsecondary
Adult

Four essential dimensions of a performance test are detailed: directness of test method; type of criterion; standardization of conditions, and objectivity of scoring. For simplicity these factors are described as if each were dichotomous, when in actuality each is a continuum; a test method may be more or less direct, conditions more or less standardized. Moreover, as shown here, the dimensions are depicted as independent, when in practice they are not--for instance, indirect methods of testing are often used to attain objective scoring; and process criteria to achieve standardized conditions. Nevertheless, this simple framework provides a useful analytic tool for developers and users of performance tests. It can guide the development of a test, or be used after the fact to identify weaknesses in existing tests. More generally it defines problem areas confronting the performance testing practitioner--problem areas which must be addressed by research and creative development work if performance tests are to be used reliably and validly. (Author)

Suggested Users: Testing specialists

1 Quinto, F. and McKenna, B. Alternatives to standardized testing.
5 Washington, D.C.: National Education Association, 1977. 49 pp.

Available from National Education Association, 1201 16th Street N.W., Washington, D.C. 20036.

Content Area: Assessment methodology

Grade Level(s): Elementary
Secondary

This monograph deals with a final recommendation of the National Education Association's Task Force on Testing that alternatives to standardized test be identified and disseminated. Over a period of three years the Task Force studied the issues surrounding testing, gathered data from across the country, and sought advice of knowledgeable persons and agencies within and outside the profession. This monograph represents a handbook of alternatives. It contains five alternatives to standardized testing for evaluating student learning progress. These include performance contracts with students, interview techniques, teacher-made tests, criterion referenced tests, and alterations in program selection procedures. Each alternative is defined and procedural details are provided. Citing the availability of many additional alternatives, the authors state that the document may continue to be unfinished for some time to come. Teachers are called upon to develop and disseminate as many alternatives as they can. (Author/RS)

Suggested Users: Testing specialists
Curriculum specialists
Teachers